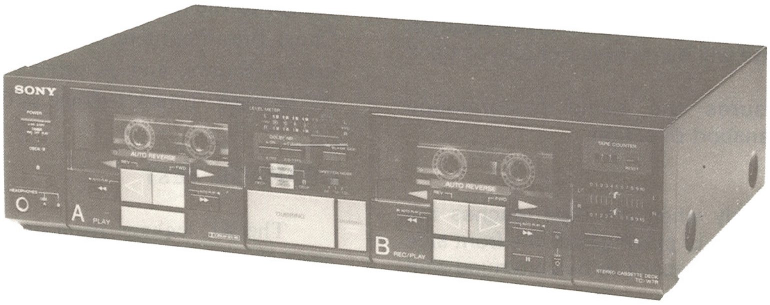
TC-W7R

SERVICE MANUAL

US Model
E Model
AEP Model



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SESSION CD 1000

Tape Transport Mechanism Type	TCM-150R3 (A DECK) TCM-150R5 (B DECK)

SPECIFICATIONS

Recording system	4-track 2-channel stereo
Fast-forward and rewind time	Approx. 90 sec. (with C-60 cassette)
Bias frequency	105 kHz

Signal-to-noise ratio (NAB, at peak level)

Dolby NR button Cassette	OFF	B-TYPE ON	C-TYPE ON
TYPE IV (Sony METALLIC)	58 dB	65 dB	71 dB
TYPE II (Sony UCX)	57 dB	64 dB	70 dB
TYPE I (Sony BHF)	54 dB	61 dB	67 dB

Total harmonic distortion	1.0% (with Sony METALLIC cassette)
Frequency response	DOLBY NR OFF • With TYPE IV cassette (Sony METALLIC) 20 - 17,000 Hz 30 - 15,000 Hz (±3 dB) 30 - 13,000 Hz (±3 dB, 0 VU recording) 30 - 15,000 Hz (DIN) • With TYPE II cassette (Sony UCX) 20 - 16,000 Hz 30 - 15,000 Hz (±3 dB) 30 - 15,000 Hz (DIN) • With TYPE I cassette (Sony BHF) 20 - 15,000 Hz 30 - 15,000 Hz (DIN)
Wow and flutter	0.045% WRMS (NAB) ±0.15% (DIN)
Inputs	Line inputs (phono jacks) Sensitivity 77.5 mV (−20 dB) Input impedance 50 k ohms
Outputs	Line outputs (phono jacks) Rated output level 0.44 V (−5 dB) at load impedance 50 k ohms Load impedance over 10 k ohms Headphone output Output level −28 dB at a load impedance of 8 ohms

General

Power requirements	120 V ac, 60 Hz (US model) 220 V ac, 50/60 Hz (AEP model) 120, 220 or 240 V ac adjustable 50/60 Hz (E model)
Power consumption	25 watts
Dimensions	Approx. 430 × 105 × 275 mm (w/h/d) ($17 \times 4\frac{1}{8} \times 10\frac{7}{8}$ inches) including projecting parts and controls
Weight	Approx. 5.5 kg (12 lbs 3 oz)

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY SHADING AND MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

STEREO DOUBLE CASSETTE DECK

MICROFILM

SONY®

TC

FEATURES

Auto-reverse recording and playback (deck B)
Continuous recording and playback of both sides of the cassette is possible without turning the cassette over. When the tape reaches its end, the roto-bilateral record/playback head reverses position and the other side of the cassette will be recorded or played back automatically.
The roto-bilateral head assures the same performance characteristics in either tape transport direction.

Quick reverse (deck B)
The head reverses position quickly when the tape reaches the leader tape at the end when recording or playing back the front side of a cassette, allowing recording or playback to be continued with little interruption.

Synchro dubbing function
Either one side or both sides of the cassette can be duplicated at normal or high speed.

Long playback function
When cassettes are loaded in both decks A and B and deck A is started first, each deck plays back the cassette alternately 5 times. When a cassette is loaded in either deck, it is played back 5 times.

Blank skip function
Blank spaces of 10 seconds or more can be skipped in either fast-forward or fast-reverse mode so that only the recorded portions of the tape are played back.

C-type Dolby NR (noise reduction) system
In addition to the conventional B-type Dolby NR system, this cassette deck employs the newly-developed C-type Dolby NR system which reduces tape noise twice as effectively as the B-type system.

Multi purpose remote control
With the optional system remote controller RM-S410, the various operations (AMS, rec muting, etc.) can be performed from a distance. The SYNCHRO connector is provided for synchronized recording with a turntable.

Timer-activated recording or playback (deck B)
A timer switch is provided to turn the deck on and off at times preset on an optional timer.

AMS (Automatic Music Sensor)
The AMS locates the beginning of the selection being played or the following selection and plays back the selection automatically.

Automatic tape select system
Type I, II or IV tape is automatically detected and the recorder is adjusted to its optimum bias current for recording and the optimum equalization for both recording and playback by simply inserting the cassette in the cassette holder.

SAFETY CHECK-OUT (US Model)

After correcting the original service problem, perform the following safety check before releasing the set to the customer:
Check the antenna terminals, metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

LEAKAGE TEST

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microampers). Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instruments.
2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The "limit" indication is 0.75 V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2 V AC range are suitable. (See Fig. A)

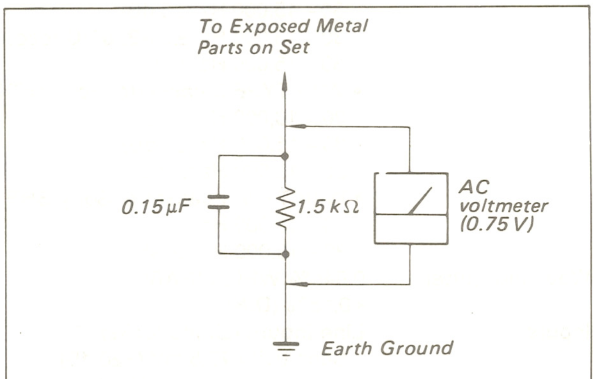
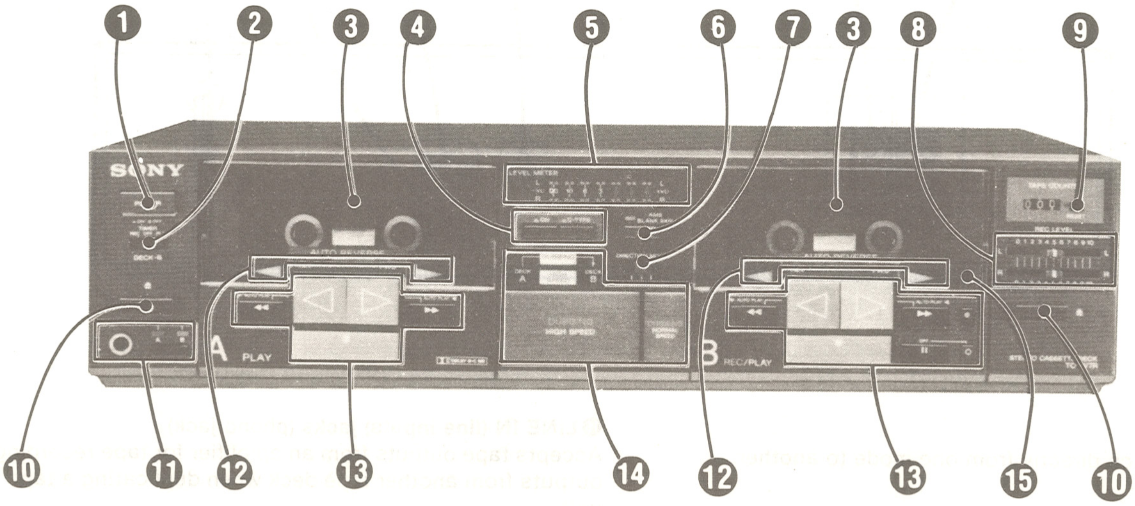


Fig. A. Using an AC voltmeter to check AC leakage.

FUNCTION OF CONTROLS

Front panel



❶ POWER switch
This turns the power on or off.

❷ TIMER switch (deck B)
You can set the unit to record or playback at a predetermined time by connecting any commercially available timer.

❸ Cassette holders

❹ DOLBY NR switches
To record or play back using the Dolby NR* (Noise Reduction) system, set the switches as follows.

Dolby NR system	Switch setting	
	Left switch	Right switch
Dolby B	▭ ON	⊓ OFF
Dolby C	▭ ON	▭ ON
Dolby OFF	⊓ OFF	Either position

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❺ PEAK LEVEL METERs
These meters show the peak input level of each channel during recording, and recorded levels in the playback mode.
When both decks A and B are activated, the meters show the level of the deck B.

❻ AMS/BLANK SKIP button and indicator
To activate the AMS and blank skip functions, press this button. The indicator of the button lights. To cancel these functions, press t again. The indicator goes off.

❼ DIRECTION MODE switch
Set this switch to select the mode of tape movement for recording and playback.

⇄ (one-direction) : To record or play back one side of the cassette.
⥂ (one-cycle) : To record or play back both sides of the cassette. If the switch is set to this position when the reverse side of the cassette is being recorded or played back, the tape will stop at the end of that side.
⟲ (five-cycle) : To play back both sides of the cassette five times. If the switch is set to this position when the reverse side of the cassette is being recorded or played back, the tape will stop at the end of the 5th playback of the reverse side so that the front side will have been played back only four times.
The recording will stop at the end of the reverse side.

❽ REC LEVEL (recording level) controls
Adjust the recording level by observing the PEAK LEVEL METERs.

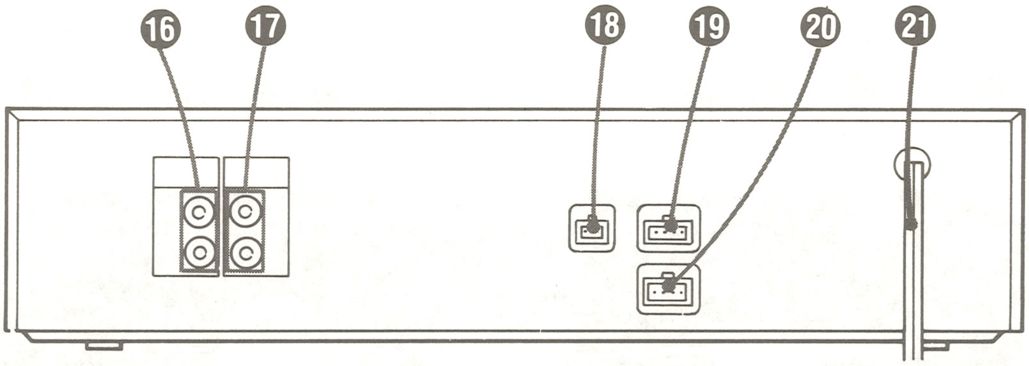
❾ TAPE COUNTER and RESET button (deck B)
The tape counter provides a numerical reference point while recording which can be used to index a recorded cassette. To reset to zero, press the RESET button.

❿ ⏏ (eject) buttons
Press these buttons to open the cassette holders.

⓫ HEADPHONES jack (stereo phone jack)
Connect a pair of headphones either to monitor the input signals to be recorded or to listen to a recording in the playback mode.

⓬ DIRECTION indicators
Light up in green for normal operation. When ● button is pressed, these indicators turn to red.

Rear panel



⑬ Function buttons
It is possible to switch directly from one mode to another.

(decks A and B)
▷ (forward) button : Press this button to play the front side of the cassette. To record, press this button while holding the ● button down. The tape is transported to the right.
◁ (reverse play) button : Press this button to play back the reverse side of the cassette. To record on the reverse side, press this button while holding the ● button down. The tape will be transported to the left.
◀◀ (fast-reverse) button : Press this button to advance the tape rapidly to the left. It is also used for the AMS and auto play functions.
▶▶ (fast-forward) button : Press this button to advance the tape rapidly to the right. It is also used for the AMS and auto play functions.
■ (stop) button : Press this button to stop the tape, or to disengage the ● button.

(deck B)
❚❚ button : Press this button to stop the tape running for a moment during recording or playback.
● (record) button : Press this button together with the ▷ or ◁ button to start recording. When this button is pressed for recording level adjustment, the deck will detect the tab of the cassette and the DIRECTION indicators ◁ and ▷ will illuminate to indicate that a recording can be made. If the tab on one side is removed, the indicator will not light.
○ (record muting) button : Press this button to eliminate unwanted material and to insert a blank space during recording.

⑭ NORMAL SPEED button, HIGH SPEED button and indicators
Press these buttons to dub from deck A to B.
NORMAL SPEED: Press for normal speed dubbing. The DUBBING indicator illuminates.
HIGH SPEED: Press for high speed dubbing. The DUBBING and HIGH SPEED indicators illuminate.

⑮ ❚❚ (pause) indicator
Illuminates when the ❚❚ button is pressed. When the power is supplied, the indicator flickers for a few seconds in standby mode.

⑯ LINE IN (line inputs) jacks (phono jack)
Accepts tape outputs from an amplifier for tape recording and line outputs from another tape deck when duplicating a tape from that unit.

⑰ LINE OUT (line outputs) jacks (phono jack)
Accepts tape inputs from an amplifier for playing back a tape and line inputs from another tape deck for duplicating a tape onto that unit.
The signal is not output at LINE OUT jacks even when the ● button is pressed.

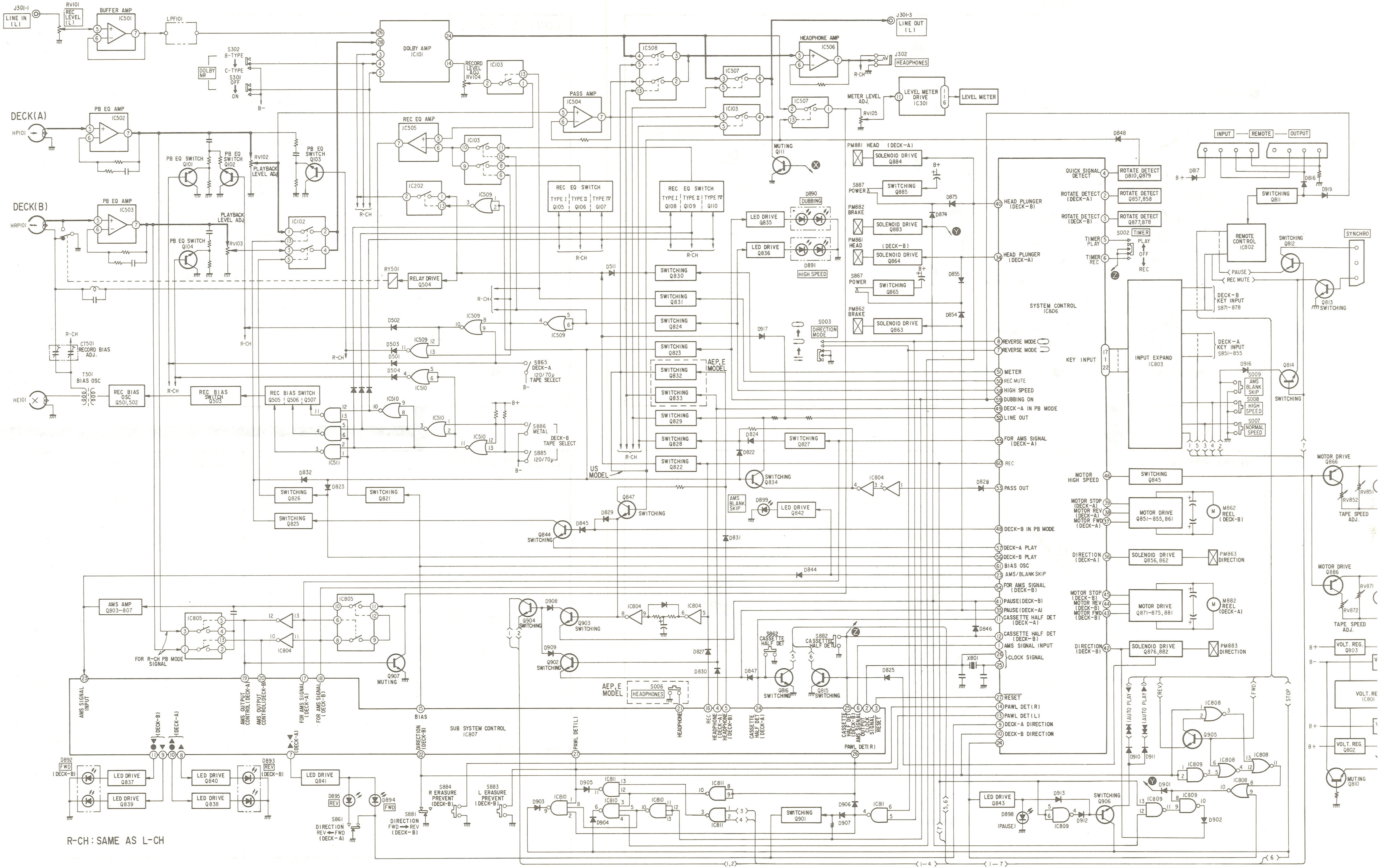
⑱ SYNCHRO connector
For synchro recording, connect to the remote connector of the turntable system.

⑲ REMOTE input connector
Connect to the 🅁 OUT connector of the system remote controller RM-S410 (option).

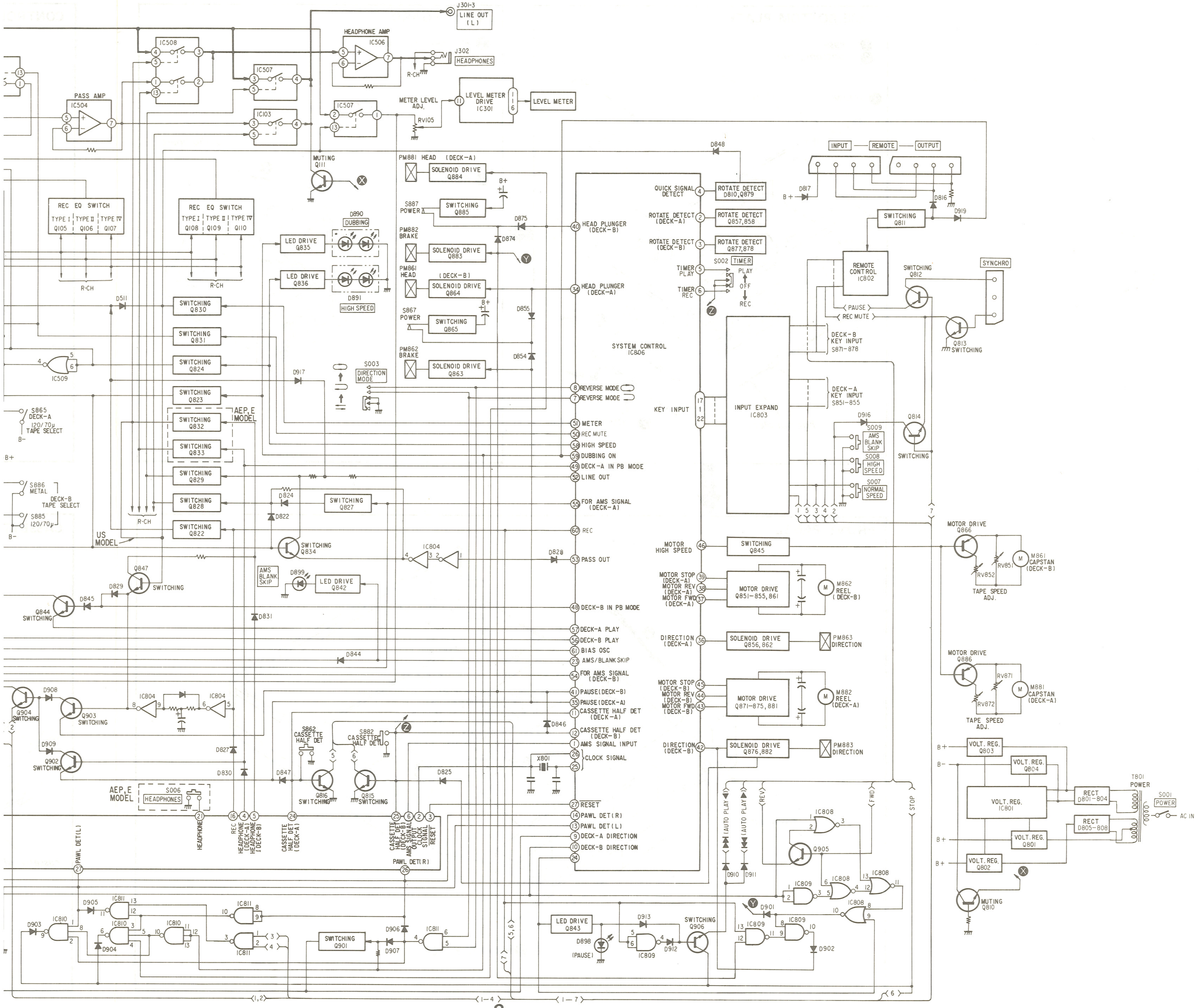
⑳ REMOTE output connector
Connect to the REMOTE connector of the CD player.

㉑ Power cord

SECTION 1
BLOCK DIAGRAM


J301-1
LINE IN (L)
RV101 REC LEVEL (L)
BUFFER AMP IC501
LPF101
DOLBY AMP IC101
J301-3 LINE OUT (L)
S302 B-TYPE
C-TYPE
DOLBY NR
S301 OFF ON
RECORD LEVEL ADJ. RV104
IC103
PASS AMP IC504
IC508
IC507
HEADPHONE AMP IC506
J302 HEADPHONES
METER LEVEL ADJ. RV105
LEVEL METER DRIVE IC301
LEVEL METER
DECK(A)
HP101
PB EQ AMP IC502
PB EQ SWITCH Q101
PB EQ SWITCH Q102
RV102 PLAYBACK LEVEL ADJ
PB EQ SWITCH Q103
REC EQ AMP IC505
REC EQ SWITCH TYPE I TYPE II TYPE IV Q105 Q106 Q107
REC EQ SWITCH TYPE I TYPE II TYPE IV Q108 Q109 Q110
MUTING Q111
DECK(B)
HRP101
PB EQ AMP IC503
PLAYBACK LEVEL ADJ
PB EQ SWITCH Q104
RV103
IC202
IC509
IC102
R-CH
RY501
RELAY DRIVE Q504
D511
CT501 RECORD BIAS ADJ.
T501 BIAS OSC
HE101
REC BIAS OSC Q501,502
REC BIAS SWITCH Q503
REC BIAS SWITCH Q505 Q506 Q507
IC510
IC511
S865 DECK-A 120/70μ TAPE SELECT
S886 METAL
DECK-B TAPE SELECT
S885 120/70μ
B+
B−
D502
D503
D501
D504
D832
D823
SWITCHING Q826
SWITCHING Q821
SWITCHING Q825
SWITCHING Q830
SWITCHING Q831
SWITCHING Q824
SWITCHING Q823
SWITCHING Q832
SWITCHING Q833
AEP,E MODEL
SWITCHING Q829
SWITCHING Q828
SWITCHING Q822
US MODEL
SWITCHING Q847
D829
D845
Q844 SWITCHING
SWITCHING Q834
D824
D822
SWITCHING Q827
LED DRIVE Q835
LED DRIVE Q836
D890 DUBBING
D891 HIGH SPEED
D917
S003 DIRECTION MODE
AMS BLANK SKIP
D899
LED DRIVE Q842
D831
D844
IC804
D828
PM881 HEAD (DECK-A)
SOLENOID DRIVE Q884
S887 POWER
SWITCHING Q885
PM882 BRAKE
SOLENOID DRIVE Q883
PM861 HEAD (DECK-B)
SOLENOID DRIVE Q864
S867 POWER
SWITCHING Q865
PM862 BRAKE
SOLENOID DRIVE Q863
D875
D874
D855
D854
HEAD PLUNGER (DECK-B)
HEAD PLUNGER (DECK-A)
SYSTEM CONTROL IC806
REVERSE MODE
METER
REC MUTE
HIGH SPEED
DUBBING ON
DECK-A IN PB MODE
LINE OUT
FOR AMS SIGNAL (DECK-A)
REC
PASS OUT
DECK-B IN PB MODE
DECK-A PLAY
DECK-B PLAY
BIAS OSC
AMS/BLANK SKIP
FOR AMS SIGNAL (DECK-B)
PAUSE (DECK-B)
PAUSE (DECK-A)
CASSETTE HALF DET (DECK-A)
CASSETTE HALF DET (DECK-B)
AMS SIGNAL INPUT
CLOCK SIGNAL
X801
RESET
PAWL DET (R)
PAWL DET (L)
DECK-A DIRECTION
DECK-B DIRECTION
D848
QUICK SIGNAL DETECT
ROTATE DETECT D810,Q879
ROTATE DETECT (DECK-A)
ROTATE DETECT Q857,858
ROTATE DETECT (DECK-B)
ROTATE DETECT Q877,878
TIMER PLAY
TIMER REC
S002 TIMER PLAY OFF REC
KEY INPUT
INPUT EXPAND IC803
INPUT
REMOTE
OUTPUT
D817
D816
D819
SWITCHING Q811
REMOTE CONTROL IC802
SWITCHING Q812
SYNCHRO
PAUSE
REC MUTE
DECK-B KEY INPUT S871-878
Q813 SWITCHING
DECK-A KEY INPUT S851-855
D916
S009 AMS BLANK SKIP
S008 HIGH SPEED
S007 NORMAL SPEED
Q814
SWITCHING
MOTOR HIGH SPEED
SWITCHING Q845
MOTOR DRIVE Q866
RV852
RV851
TAPE SPEED ADJ.
MOTOR STOP (DECK-A)
MOTOR REV (DECK-A)
MOTOR FWD (DECK-A)
MOTOR DRIVE Q851-855, 861
M862 REEL (DECK-B)
DIRECTION (DECK-A)
SOLENOID DRIVE Q856, 862
PM863 DIRECTION
MOTOR DRIVE Q886
RV871
RV872
TAPE SPEED ADJ.
MOTOR STOP (DECK-B)
MOTOR REV (DECK-B)
MOTOR FWD (DECK-B)
MOTOR DRIVE Q871-875, 881
M882 REEL (DECK-A)
DIRECTION (DECK-B)
SOLENOID DRIVE Q876, 882
PM883 DIRECTION
VOLT. REG. Q803
VOLT. REG IC801
VOLT. REG. Q802
MUTING Q810
AMS AMP Q803-807
IC805
FOR R-CH PB MODE SIGNAL
MUTING Q907
Q904 SWITCHING
D908
Q903 SWITCHING
D909
Q902 SWITCHING
D827
D830
D847
D846
AEP,E MODEL
S006 HEADPHONES
S862 CASSETTE HALF DET
S882 CASSETTE HALF DET
Q816 SWITCHING
Q815 SWITCHING
D825
AMS SIGNAL INPUT
AMS OUTPUT CONTROL (DECK-A)
AMS OUTPUT CONTROL (DECK-B)
FOR AMS SIGNAL (DECK-A)
FOR AMS SIGNAL (DECK-B)
BIAS
SUB SYSTEM CONTROL IC807
DIRECTION (DECK-B)
PAWL DET (L)
HEADPHONE
REC
HEADPHONE (DECK-A)
HEADPHONE (DECK-B)
CASSETTE HALF DET (DECK-A)
CASSETTE HALF DET (DECK-B)
AMS SIGNAL OUTPUT
CLOCK SIGNAL
RESET
PAWL DET (R)
AUTO PLAY
REV
FWD
STOP
IC808
Q905
D910
D911
IC809
D901
D902
D892 FWD (DECK-B)
LED DRIVE Q837
LED DRIVE Q839
(DECK-B)
(DECK-A)
LED DRIVE Q840
LED DRIVE Q838
D893 REV (DECK-B)
(DECK-A)
LED DRIVE Q841
D895 REV
D894 FWD
S861 DIRECTION REV ← FWD (DECK-A)
S881 DIRECTION FWD → REV (DECK-B)
S884 R ERASURE PREVENT (DECK-B)
S883 L ERASURE PREVENT (DECK-B)
D903
IC810
D905
IC811
D904
D906
D907
SWITCHING Q901
LED DRIVE Q843
D898 (PAUSE)
D913
D912
SWITCHING Q906
(1,2)
(1-4)
(1-7)
(5,6)
(6)
(7)

R-CH: SAME AS L-CH


J301-3
LINE OUT (L)
HEADPHONE AMP
IC506
J302
HEADPHONES
R-CH
IC508
IC507
IC103
PASS AMP
IC504
METER LEVEL ADJ.
RV105
LEVEL METER DRIVE IC301
LEVEL METER
MUTING Q111
REC EQ SWITCH
TYPE I Q105
TYPE II Q106
TYPE IV Q107
REC EQ SWITCH
TYPE I Q108
TYPE II Q109
TYPE IV Q110
PM881 HEAD (DECK-A)
SOLENOID DRIVE Q884
S887 POWER
SWITCHING Q885
PM882 BRAKE
SOLENOID DRIVE Q883
PM861 HEAD
(DECK-B)
SOLENOID DRIVE Q864
S867 POWER
SWITCHING Q865
PM862 BRAKE
SOLENOID DRIVE Q863
D890 DUBBING
D891 HIGH SPEED
LED DRIVE Q835
LED DRIVE Q836
S003 DIRECTION MODE
SWITCHING Q830
SWITCHING Q831
SWITCHING Q824
SWITCHING Q823
SWITCHING Q832
SWITCHING Q833
AEP,E MODEL
SWITCHING Q829
SWITCHING Q828
SWITCHING Q822
SWITCHING Q827
SWITCHING Q834
IC509
IC804
S865 DECK-A 120/70μ TAPE SELECT
S886 METAL
DECK-B TAPE SELECT
S885 120/70μ
US MODEL
Q847 SWITCHING
Q844 SWITCHING
AMS BLANK SKIP
D899
LED DRIVE Q842
Q904 SWITCHING
Q903 SWITCHING
Q902 SWITCHING
S862 CASSETTE HALF DET
S882 CASSETTE HALF DET
Q816 SWITCHING
Q815 SWITCHING
X801
AEP,E MODEL
S006 HEADPHONES
HEADPHONE
REC
HEADPHONE (DECK-A)
HEADPHONE (DECK-B)
CASSETTE HALF DET (DECK-A)
CASSETTE HALF DET (DECK-B)
AMS SIGNAL
OUTPUT CLOCK SIGNAL
RESET
PAWL DET(R)
PAWL DET(L)
IC810
IC811
SWITCHING Q901
LED DRIVE Q843
D898 (PAUSE)
IC809
SWITCHING Q906
IC808
Q905
SYSTEM CONTROL IC806
HEAD PLUNGER (DECK-B)
HEAD PLUNGER (DECK-A)
REVERSE MODE
METER
REC MUTE
HIGH SPEED
DUBBING ON
DECK-A IN PB MODE
LINE OUT
FOR AMS SIGNAL (DECK-A)
REC
PASS OUT
DECK-B IN PB MODE
DECK-A PLAY
DECK-B PLAY
BIAS OSC
AMS/BLANK SKIP
FOR AMS SIGNAL (DECK-B)
PAUSE(DECK-B)
PAUSE(DECK-A)
CASSETTE HALF DET (DECK-A)
CASSETTE HALF DET (DECK-B)
AMS SIGNAL INPUT
CLOCK SIGNAL
RESET
PAWL DET(R)
PAWL DET(L)
DECK-A DIRECTION
DECK-B DIRECTION
QUICK SIGNAL DETECT
ROTATE DETECT D810,Q879
ROTATE DETECT (DECK-A)
ROTATE DETECT Q857,858
ROTATE DETECT (DECK-B)
ROTATE DETECT Q877,878
TIMER PLAY
TIMER REC
S002 TIMER
PLAY
OFF
REC
KEY INPUT
INPUT EXPAND IC803
DECK-B KEY INPUT S871-878
DECK-A KEY INPUT S851-855
S009 AMS BLANK SKIP
S008 HIGH SPEED
S007 NORMAL SPEED
Q814 SWITCHING
MOTOR HIGH SPEED
SWITCHING Q845
MOTOR STOP (DECK-A)
MOTOR REV (DECK-A)
MOTOR FWD (DECK-A)
MOTOR DRIVE Q851-855,861
M862 REEL (DECK-B)
DIRECTION (DECK-A)
SOLENOID DRIVE Q856,862
PM863 DIRECTION
MOTOR STOP (DECK-B)
MOTOR REV (DECK-B)
MOTOR FWD (DECK-B)
MOTOR DRIVE Q871-875,881
M882 REEL (DECK-A)
DIRECTION (DECK-B)
SOLENOID DRIVE Q876,882
PM883 DIRECTION
(AUTO PLAY A)
(AUTO PLAY B)
(REV)
(FWD)
(STOP)
INPUT
REMOTE
OUTPUT
SWITCHING Q811
REMOTE CONTROL IC802
PAUSE
REC MUTE
SWITCHING Q812
SYNCHRO
Q813 SWITCHING
MOTOR DRIVE Q866
M861 CAPSTAN (DECK-B)
RV851
RV852
TAPE SPEED ADJ.
MOTOR DRIVE Q886
M881 CAPSTAN (DECK-A)
RV871
RV872
TAPE SPEED ADJ.
VOLT. REG. Q803
VOLT. REG. Q804
VOLT. REG. IC801
RECT D801-804
RECT D805-808
VOLT. REG. Q801
VOLT. REG. Q802
T801 POWER
S001 POWER
AC IN
MUTING Q810
B+
B-

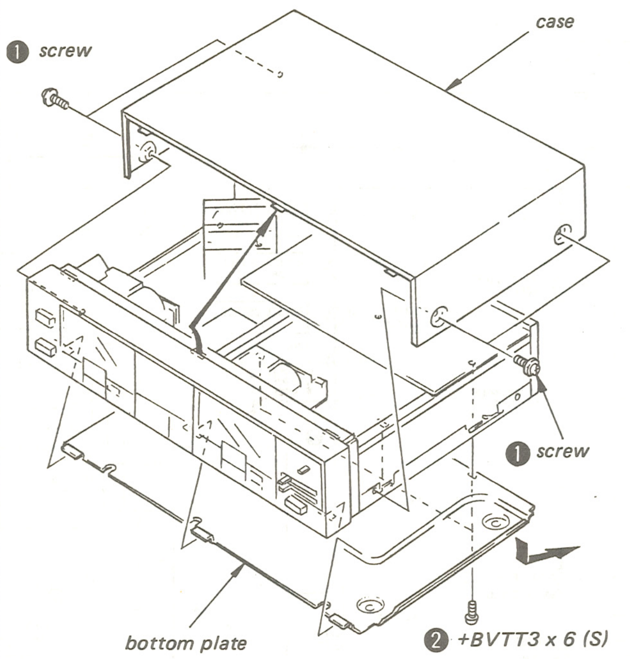
SECTION 2

DISASSEMBLY

Note: Follow the disassembly procedure in the numerical order given.

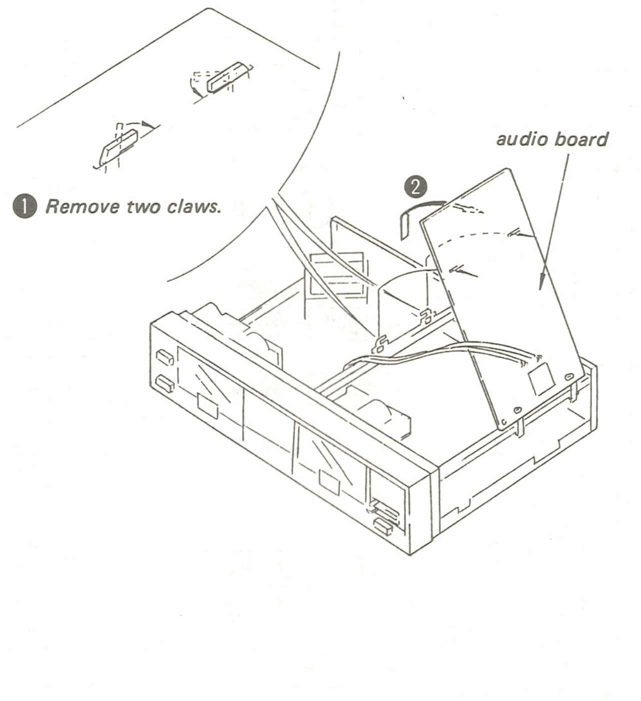
CASE/BOTTOM PLATE

① : case
② : bottom plate

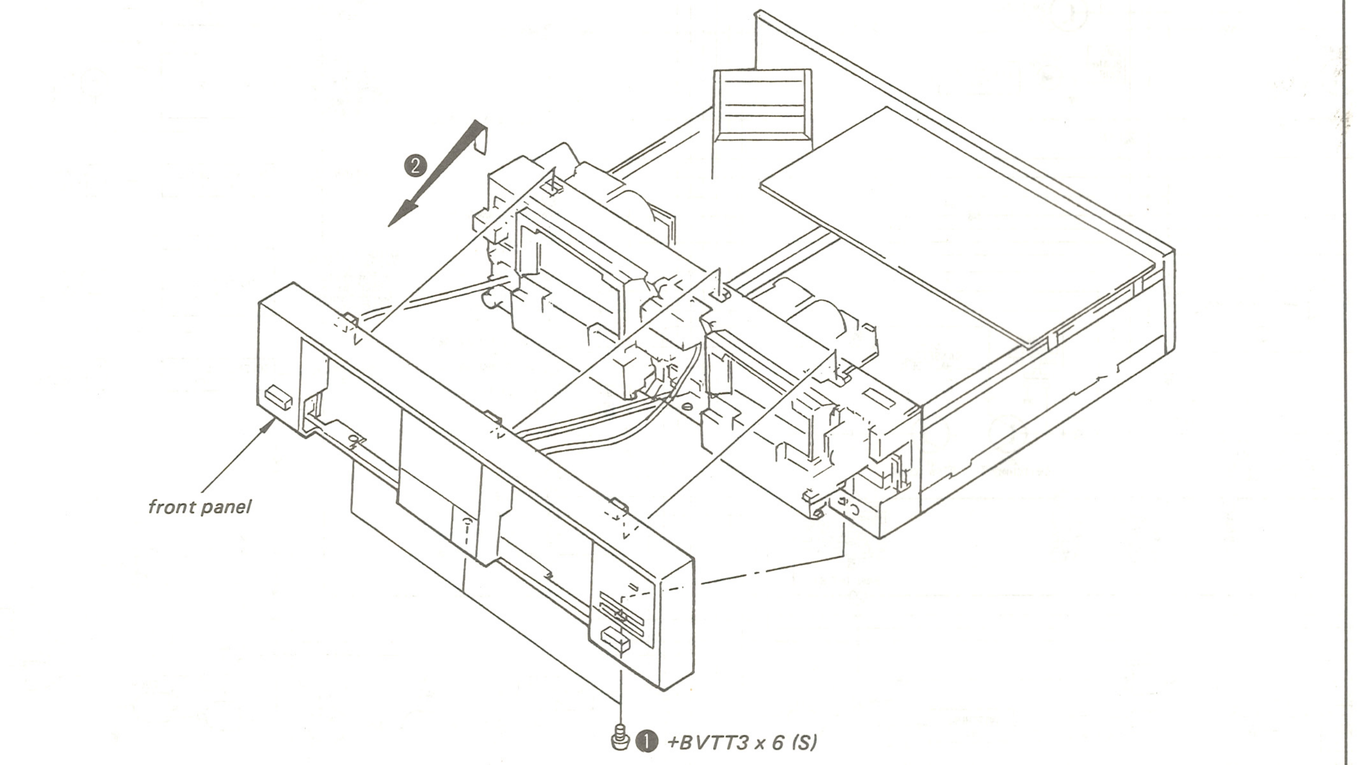

① screw
case
① screw
bottom plate
② +BVTT3 x 6 (S)

AUDIO BOARD

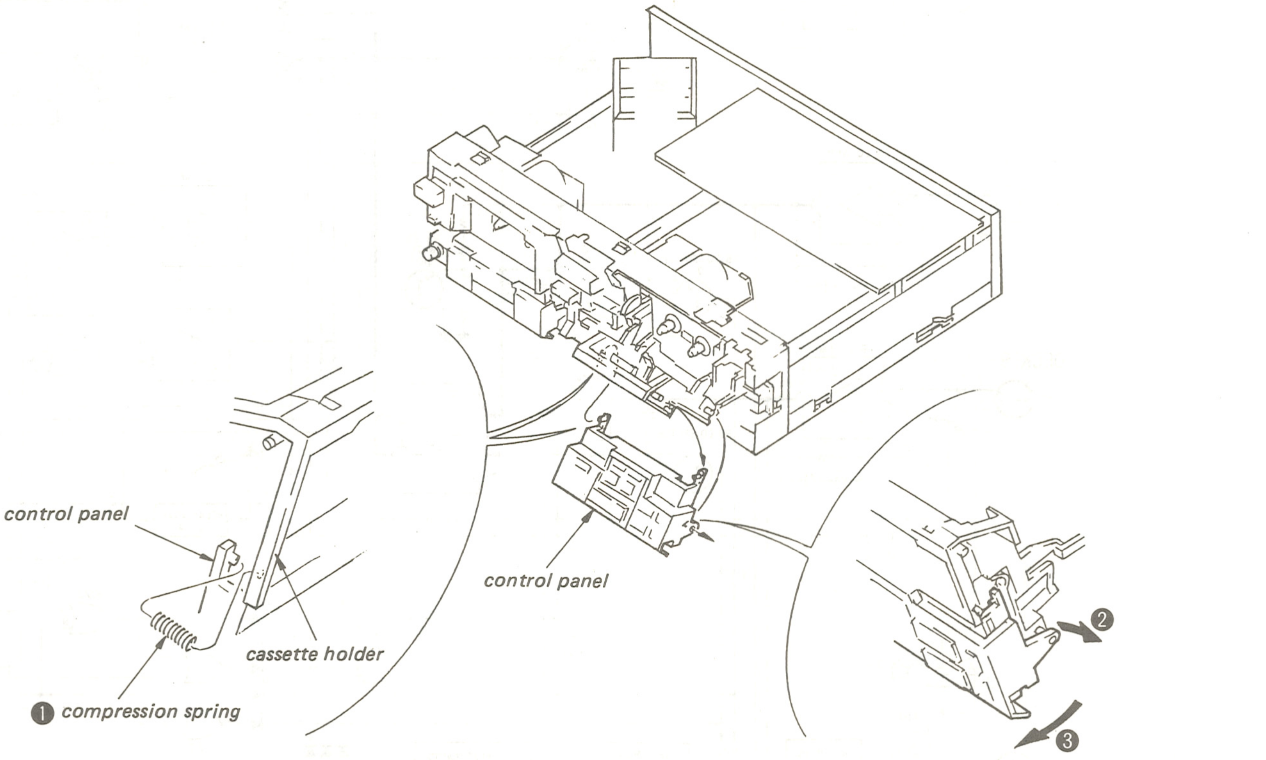
① Remove the case.


① Remove two claws.
②
audio board

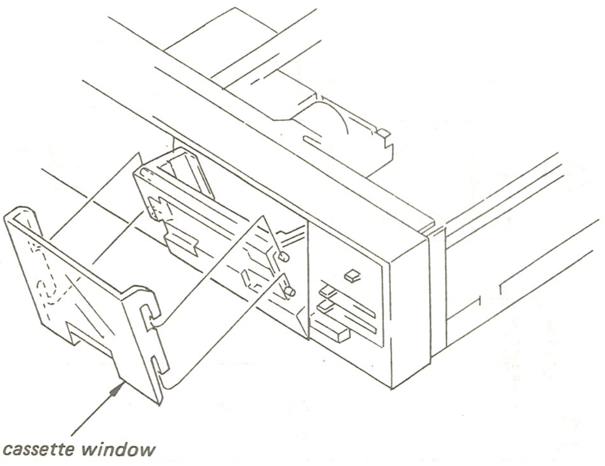
FRONT PANEL


②
front panel
① +BVTT3 x 6 (S)

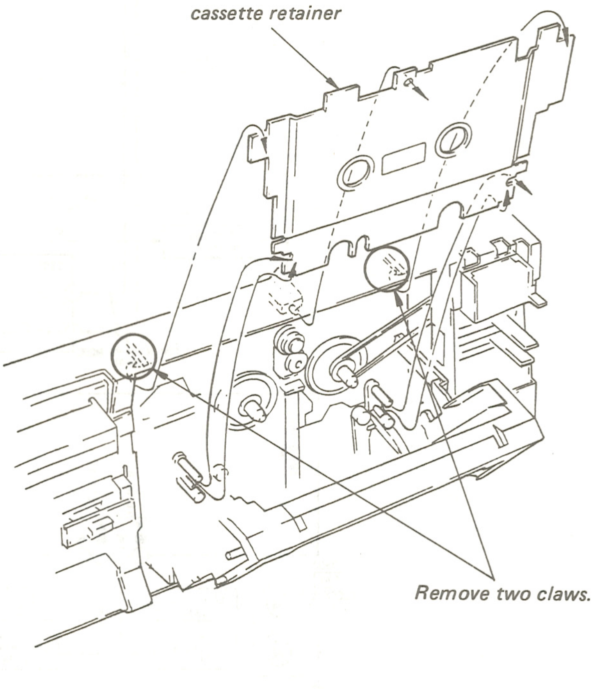
CONTROL PANEL


control panel
cassette holder
❶ compression spring
control panel
❷
❸

CASSETTE WINDOW

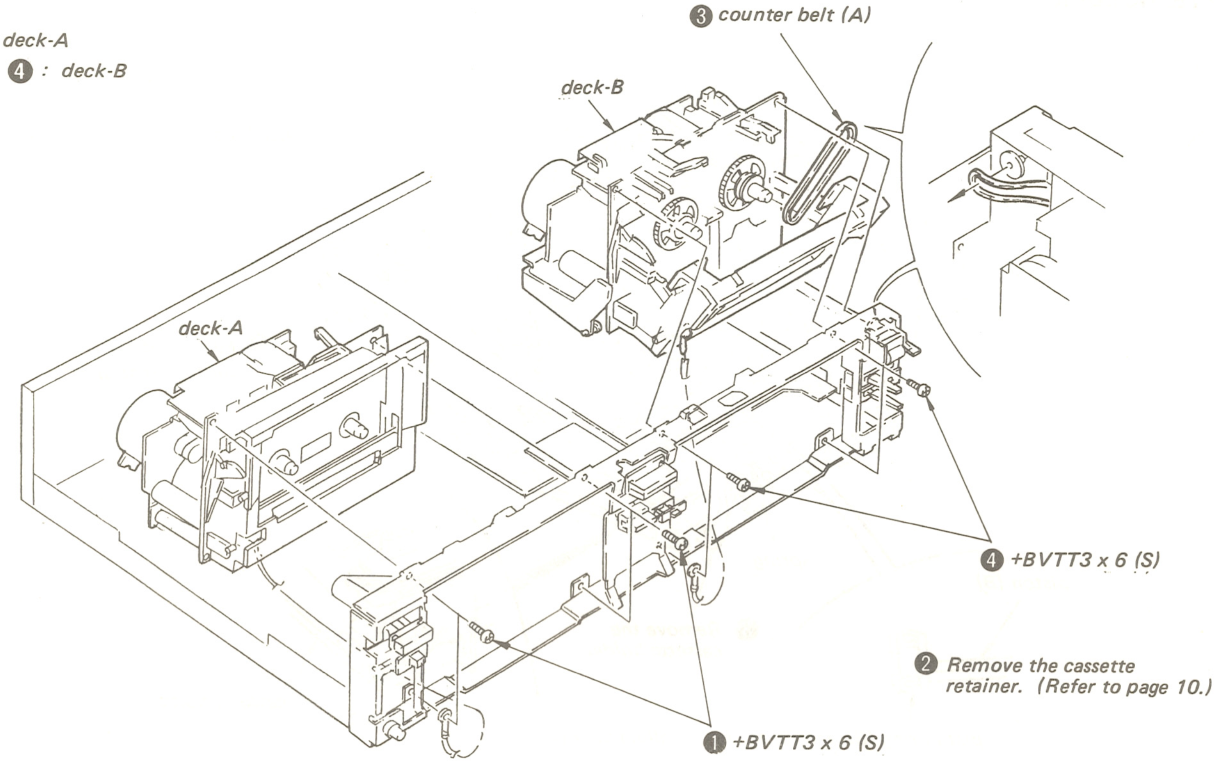

cassette window

CASSETTE RETAINER


cassette retainer
Remove two claws.

MECHANISM SECTION

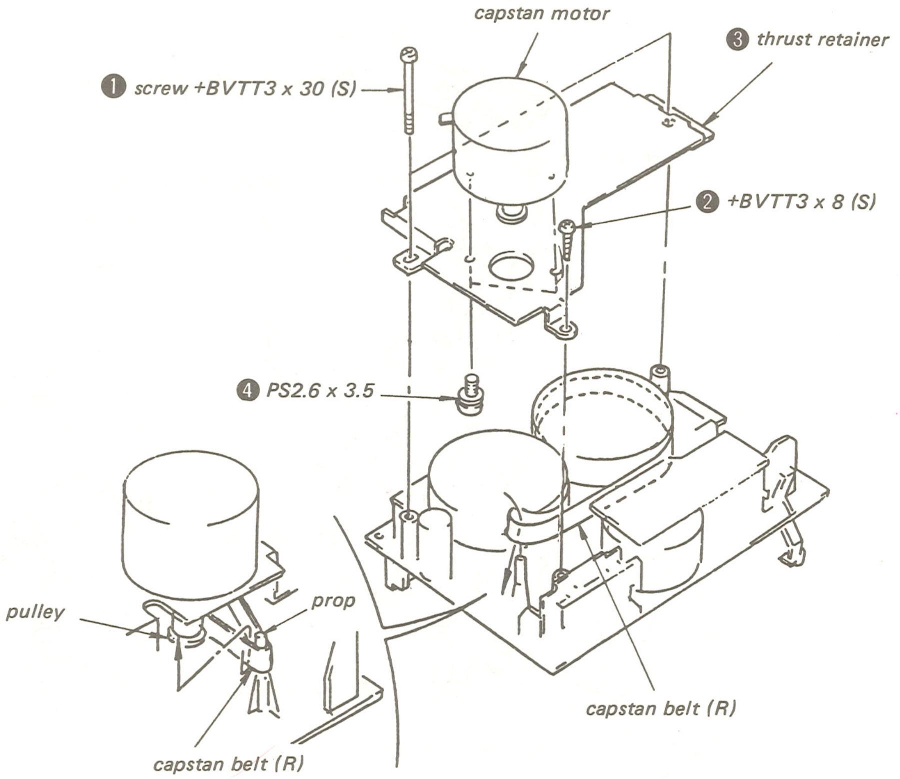
❶ : *deck-A*
❷ — ❹ : *deck-B*


❸ counter belt (A)
deck-B
deck-A
❹ +BVTT3 x 6 (S)
❶ +BVTT3 x 6 (S)

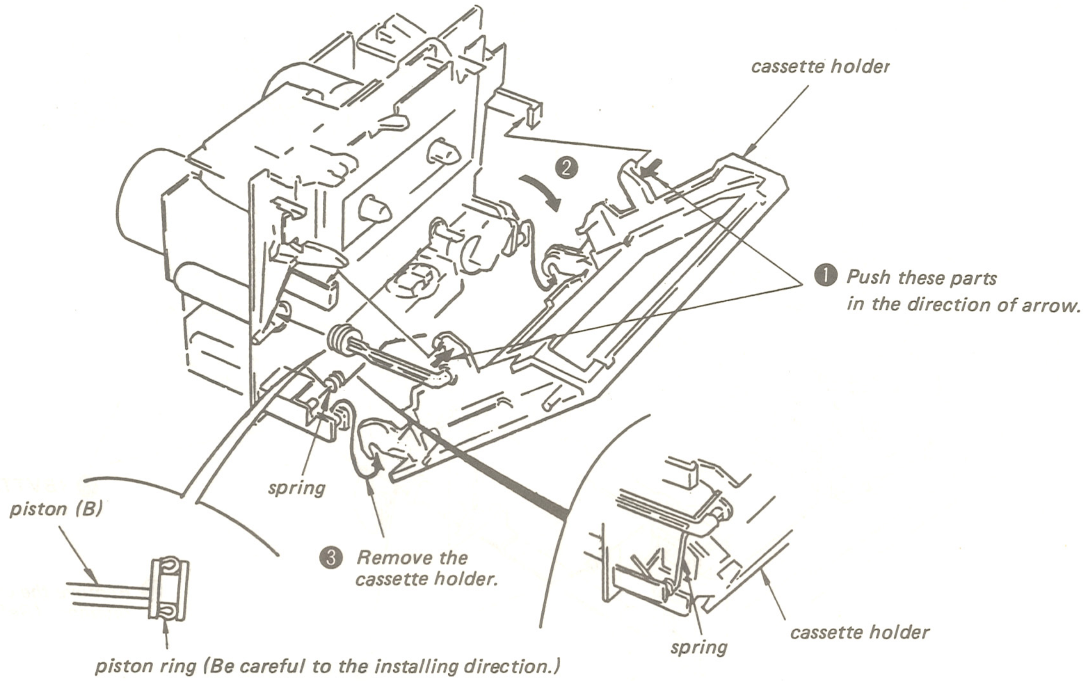
❷ *Remove the cassette retainer. (Refer to page 10.)*

CAPSTAN MOTOR/CAPSTAN BELT

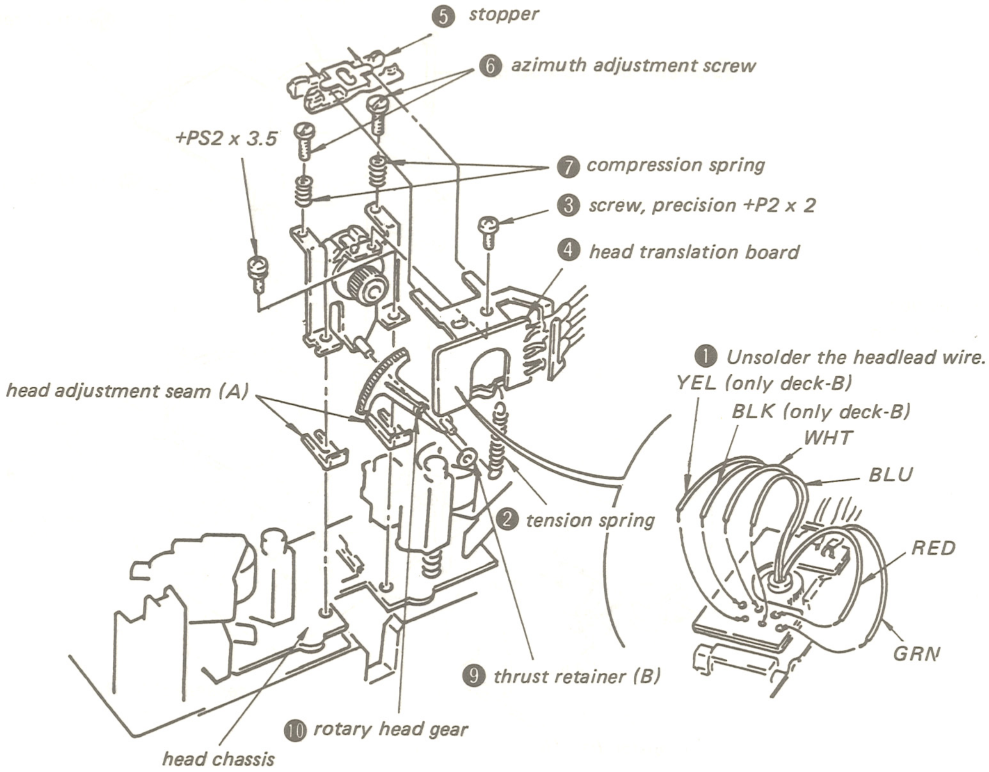
Note for installation.
1. *Hook the capstan belt (R) to the prop.*
2. *Install the motor section and then hook the capstan belt (R) to the pulley.*


capstan motor
❸ thrust retainer
❶ screw +BVTT3 x 30 (S)
❷ +BVTT3 x 8 (S)
❹ PS2.6 x 3.5
pulley
prop
capstan belt (R)
capstan belt (R)

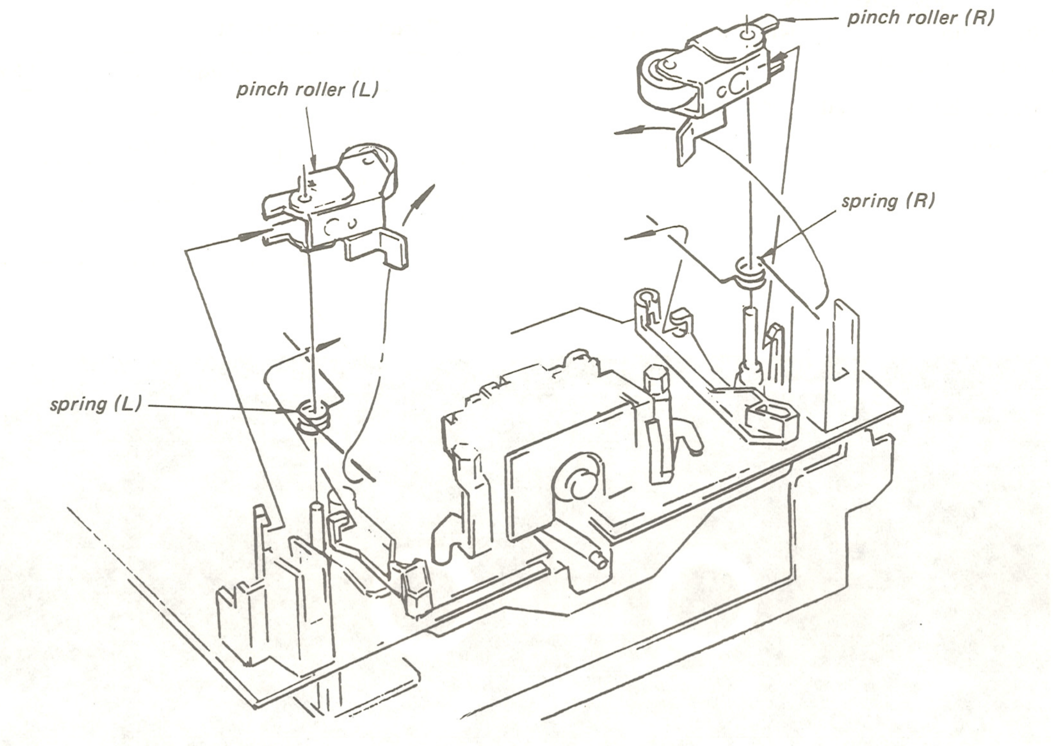
CASSETTE HOLDER


cassette holder
②
① Push these parts
in the direction of arrow.
spring
piston (B)
③ Remove the
cassette holder.
piston ring (Be careful to the installing direction.)
spring
cassette holder

HEAD UNIT

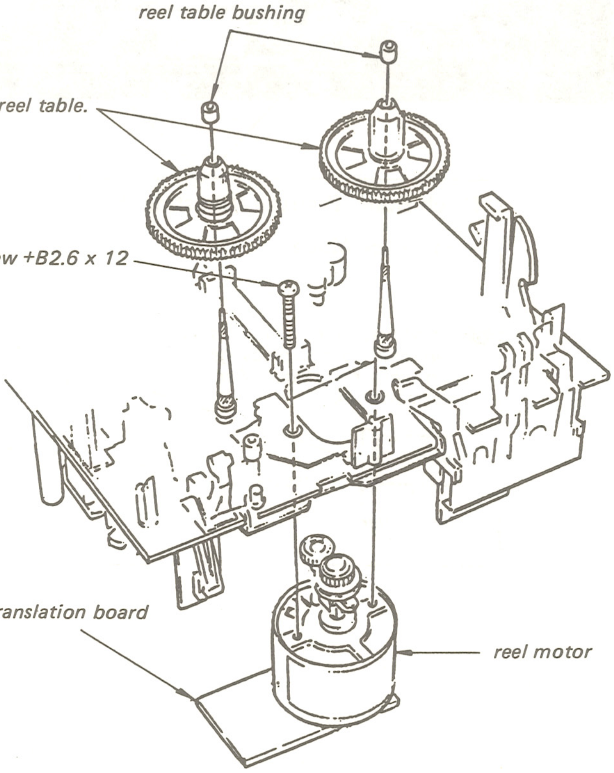

⑤ stopper
⑥ azimuth adjustment screw
+PS2 x 3.5
⑦ compression spring
⑧ screw, precision +P2 x 2
④ head translation board
① Unsolder the headlead wire.
YEL (only deck-B)
BLK (only deck-B)
WHT
BLU
head adjustment seam (A)
② tension spring
RED
GRN
⑨ thrust retainer (B)
⑩ rotary head gear
head chassis

PINCH ROLLER


pinch roller (R)
pinch roller (L)
spring (R)
spring (L)

REEL MOTOR

❶ *Remove the cassette retainer. (Refer to page 10).*


reel table bushing
❷ pull out the reel table.
❸ screw +B2.6 x 12
❹ translation board
reel motor

SECTION 3
ADJUSTMENTS

3-1. MECHANICAL ADJUSTMENTS

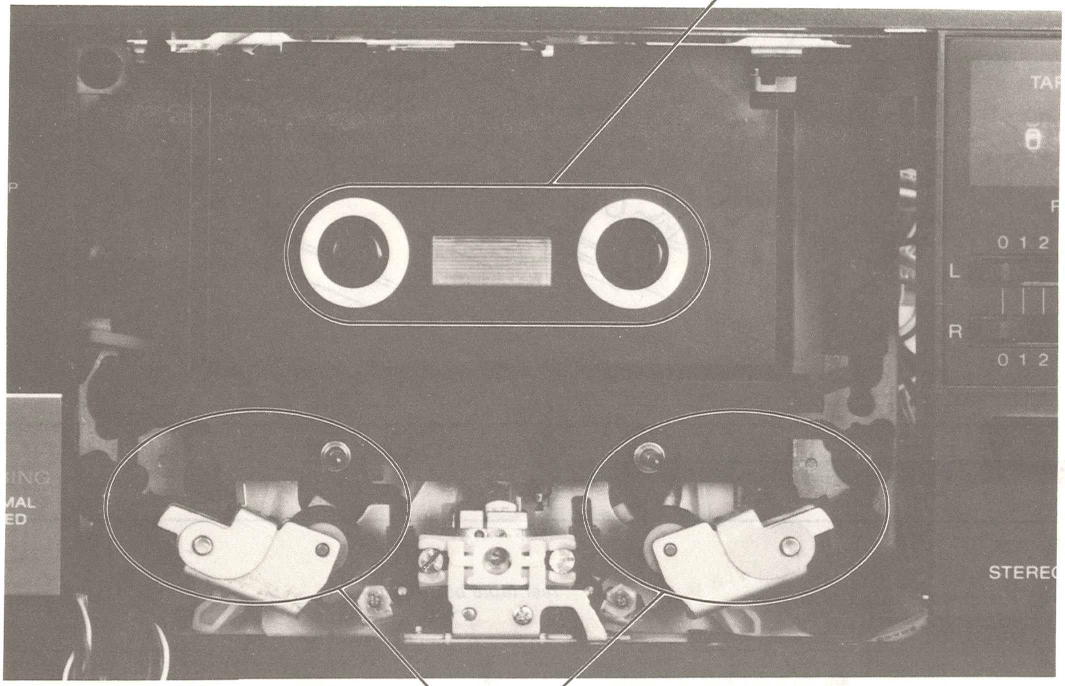
PRECAUTION

1. Clean the following parts with a denatured-alcohol-moistened swab:

   recorded/playback head
   erase head
   capstan
   pinch roller
   rubber belts

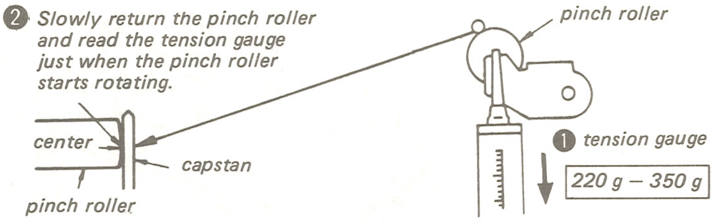
Torque Measurement

Torque	Torque meter	Meter reading
FWD	CQ-102C	30 – 60g•cm
REV	CQ-102RB	
FF/REW	CQ-201B	90 – 150g•cm



Pinch Roller Pressure Adjustment

– Playback Mode –



❷ Slowly return the pinch roller and read the tension gauge just when the pinch roller starts rotating.

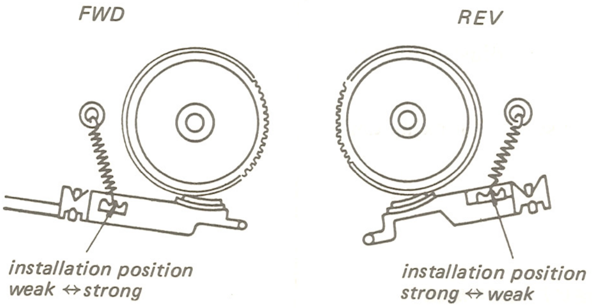
❶ tension gauge

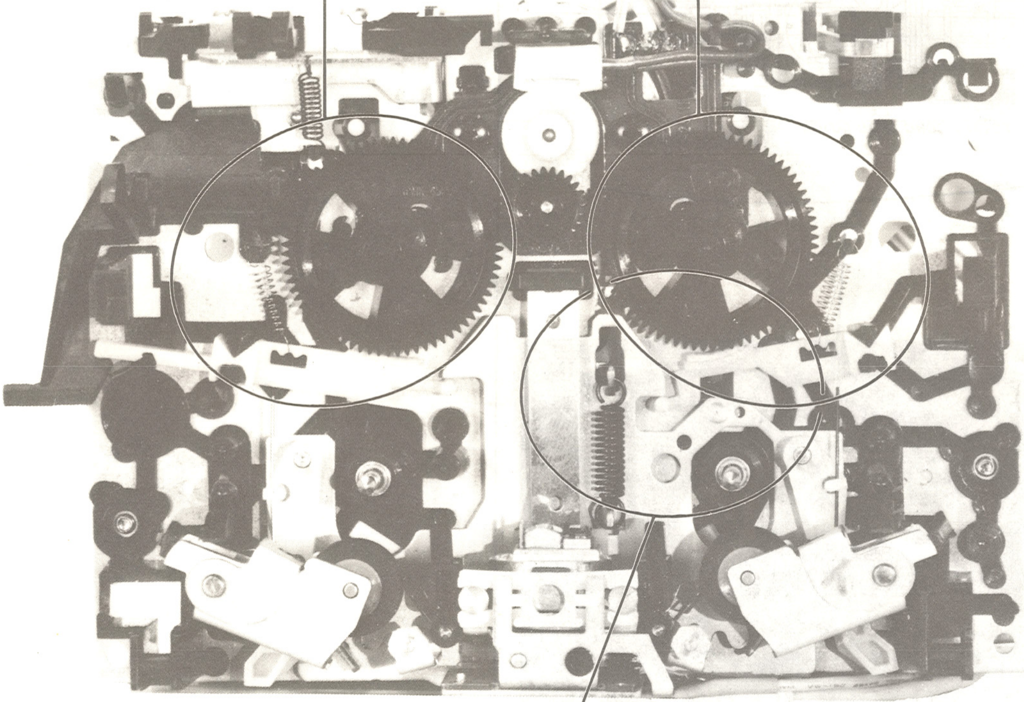
220 g – 350 g

Back Tension Adjustment

– FWD playback or REV playback –

Mode	Torque meter	Meter reading
FF	CQ-102C	2.5 – 4.5g•cm
REV	CQ-102PB	2.5 – 4.5g•cm

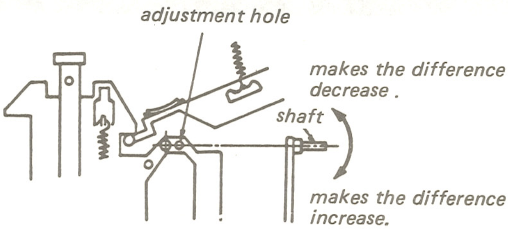

FWD
REV
installation position
weak ↔ strong
installation position
strong ↔ weak



Head Position Adjustment

– FWD pause, REV pause, AMS –

1. Confirm that the head position difference between STOP mode and FWD pause, REV pause or AMS mode is 2 mm ±0.1 mm.
2. If the specification is not satisfied, adjust by bending the shaft in the figure.

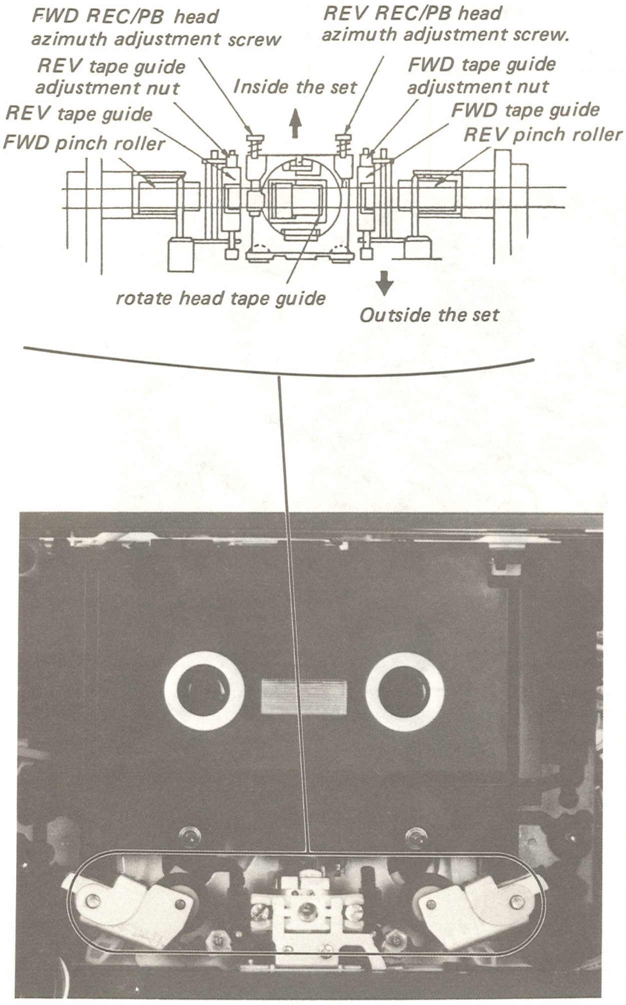

adjustment hole
makes the difference decrease .
shaft
makes the difference increase.

Tape Path Adjustment

Procedure:

1. Insert the mirror cassette (CQ-009 or CQ-012C).
2. Mode: FWD
   Adjust FWD tape guide nuts and adjustment shims for no tape curl.
3. Mode: REV
   Adjust REV tape guide nuts and adjustment shims for no tape curl.
4. After the adjustments, apply suitable locking compound to the parts adjusted.

Adjustment Location:


FWD REC/PB head azimuth adjustment screw
REV REC/PB head azimuth adjustment screw.
REV tape guide adjustment nut
Inside the set
FWD tape guide adjustment nut
REV tape guide
FWD tape guide
FWD pinch roller
REV pinch roller
rotate head tape guide
Outside the set

3-2. ELECTRICAL ADJUSTMENTS

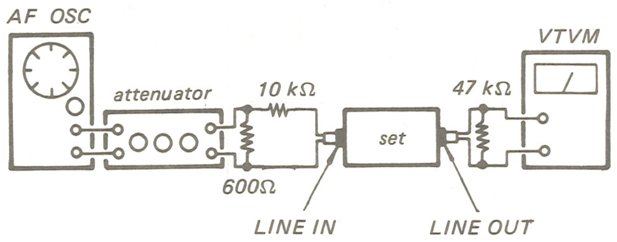
1. Demagnetize the record/playback head with a head demagnetizer. (Do not bring the head demagnetizer close to the erase head.)
2. Do not use a magnetized screwdriver for the adjustments.
3. After the adjustments, apply suitable locking compound to the parts adjusted.
4. The adjustments should be performed with the rated power supply voltage unless otherwise noted.
5. The adjustments should be performed in the order given in this service manual. (As a general rule, playback circuit adjustment should be completed before performing recording circuit adjustment.)
6. The adjustments should be performed for both L-CH and R-CH.

- Switches and controls should be set as follows unless otherwise specified.

  DOLBY NR switch: OFF
  TIMER switch: OFF

- Standard Record:
  Deliver the standard input signal level to the input jack and set the REC LEVEL control to obtain the standard output signal level.

Mode: record


AF OSC
VTVM
attenuator
10 kΩ
47 kΩ
set
600Ω
LINE IN
LINE OUT

Standard Input Level

	LINE IN
source impedance	10 kΩ
input level	0.25 V (−10 dB)

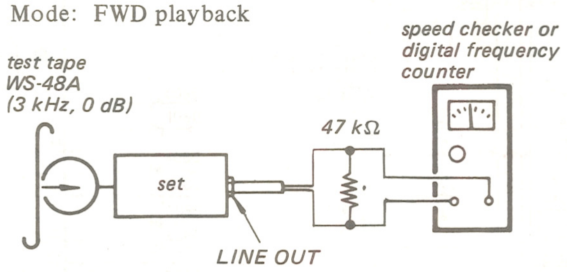
Standard Output Level

	LINE OUT
load impedance	47 kΩ
output level	0.44 V (−5 dB)

Tape Speed Adjustment

Procedure:

Mode: FWD playback


test tape
WS-48A
(3 kHz, 0 dB)
speed checker or
digital frequency
counter
47 kΩ
set
LINE OUT

1. Connect Q845 base to the ground with the lead wire.

Specification: high speed

Speed checker	Digital frequency counter
−1 – +1%	5,940 Hz – 6,060 Hz

Frequency difference between the beginning and the end of the tape should be within 0.8% (48 Hz).

Adjustment location:

DECK-A side RV851
DECK-B side RV871

2. Remove the wire in step 1.

Specification: normal speed

Speed checker	Digital frequency counter
−1 – +1%	2,970 Hz – 3,030 Hz

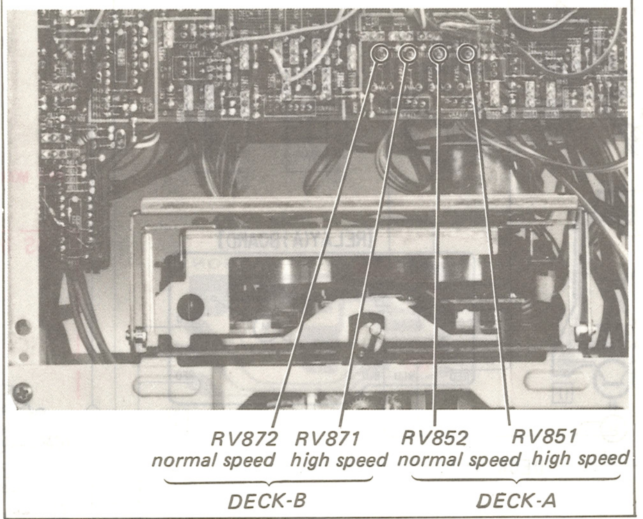
Frequency difference between the beginning and the end of the tape should be within 0.8% (25 Hz).

Adjustment location:

DECK-A side RV852
DECK-B side RV872

3. If the specifications are not satisfied, repeat step 1 and 2.

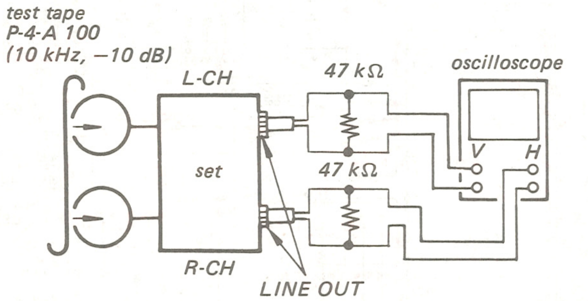
Adjustment Location: System control board.


RV872
normal speed
RV871
high speed
RV852
normal speed
RV851
high speed
DECK-B
DECK-A

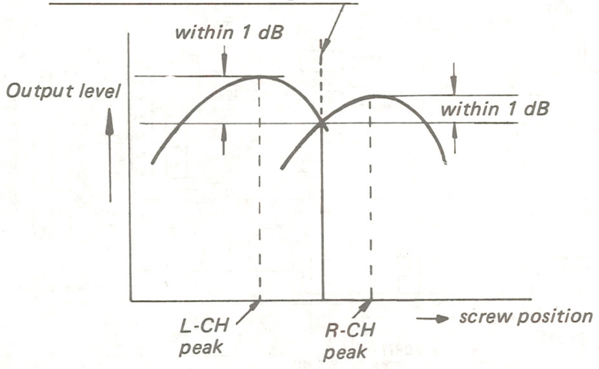
Record/Playback Head Azimuth Adjustment

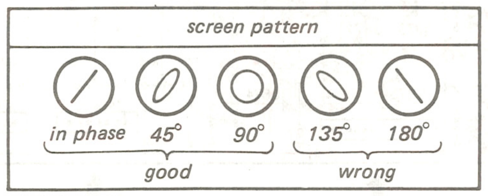
Procedure:

1. Mode: FWD playback

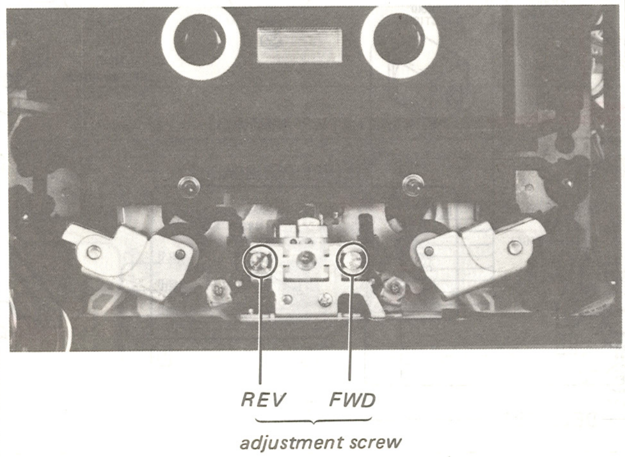

test tape
P-4-A 100
(10 kHz, −10 dB)
L-CH
47 kΩ
oscilloscope
set
47 kΩ
V
H
R-CH
LINE OUT

2. Turn the adjustment screw and check output peaks. If the peaks do not match for L-CH and R-CH, turn the adjustment screw so that outputs match within 1 dB of peak.




screen pattern
in phase
45°
90°
135°
180°
good
wrong

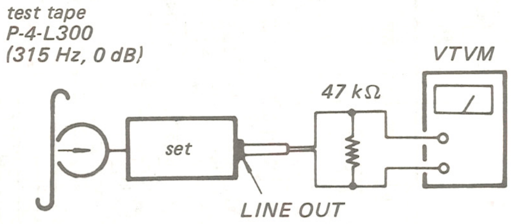
3. Mode: REV
   Repeat step 1 and 2.
4. After the adjustments, apply suitable locking compound to the parts adjusted.


REV
FWD
adjustment screw

Playback Level Adjustment

Procedure:

Mode: FWD playback


test tape
P-4-L300
(315 Hz, 0 dB)
VTVM
47 kΩ
set
LINE OUT

Adjust,

DECK-A side RV102 (L-CH), RV202 (R-CH)
DECK-B side RV103 (L-CH), RV203 (R-CH)

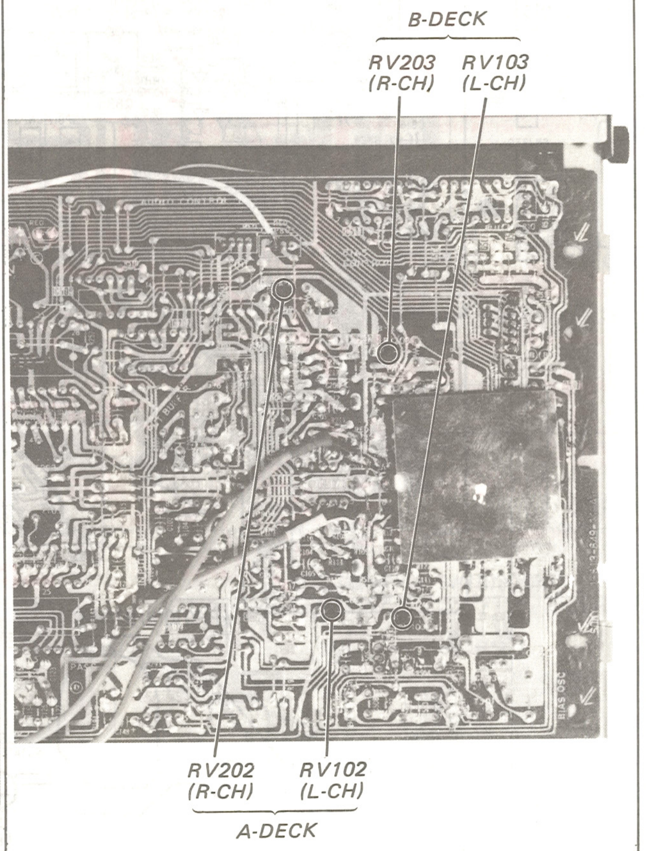
so that the specifications are satisfied.

Specification:

LINE OUT level: 0.41 – 0.46 V
(−5.5 – −4.5 dB)

level difference between the channels:
within 0.5 dB

Confirm that LINE OUT level is not changed when Playback and Stop are repeated.


B-DECK
RV203
(R-CH)
RV103
(L-CH)
RV202
(R-CH)
RV102
(L-CH)
A-DECK

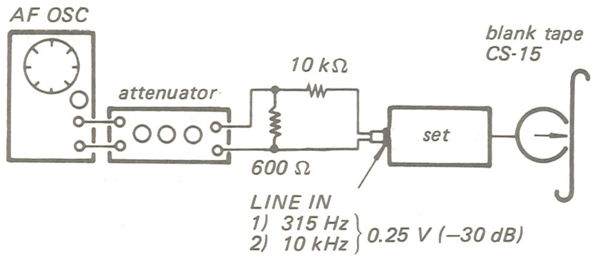
Record BIAS Adjustment

Setting:

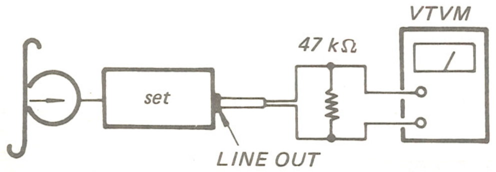
REC LEVEL control: standard record (See page 17)

Procedure:

1. Mode: record


AF OSC
attenuator
10 kΩ
600 Ω
set
blank tape
CS-15
LINE IN
1) 315 Hz
2) 10 kHz
0.25 V (−30 dB)

2. Mode: playback

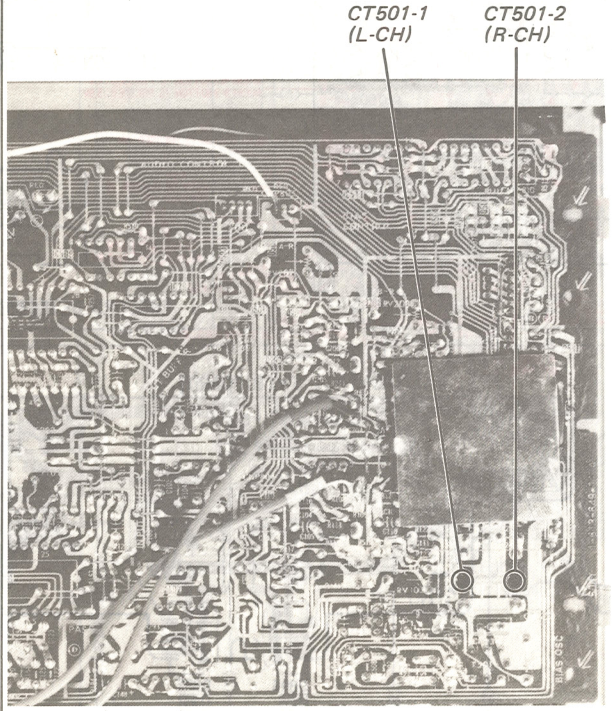

VTVM
47 kΩ
set
LINE OUT

Play back the tape recorded in step 1. If the specification is not satisfied, adjust CT501-1 (L-CH), CT501-2, (R-CH) and repeat steps 1 and 2.

Specification:

The LINE OUT level of 10 kHz signal relative to that of 315 Hz: −0.5 dB – +0.5 dB

Adjustment Location: audio board


CT501-1
(L-CH)
CT501-2
(R-CH)

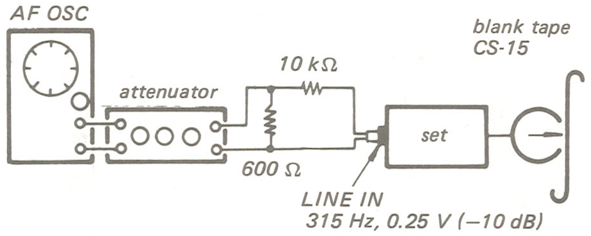
Record Level Adjustment

Setting:

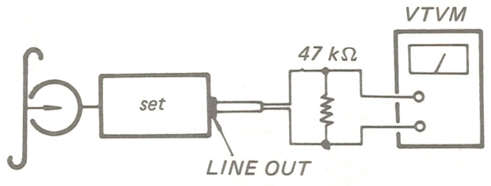
REC LEVEL Control: standard record (See page 17)

Procedure:

1. Mode: record


AF OSC
attenuator
10 kΩ
600 Ω
set
blank tape
CS-15
LINE IN
315 Hz, 0.25 V (−10 dB)

2. Mode: playback

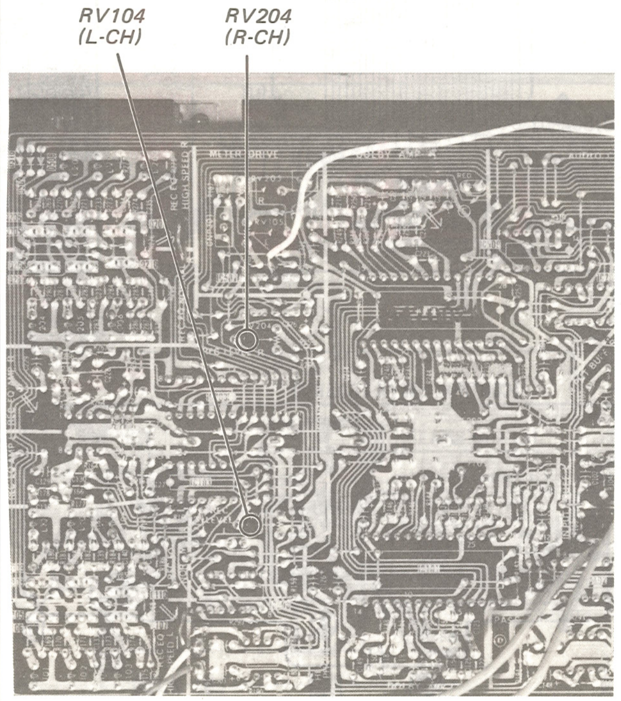

VTVM
47 kΩ
set
LINE OUT

Play back the tape recorded in step 1. If the specification is not satisfied, adjust RV104 (L-CH) RV204 (R-CH) and repeat steps 1 and 2.

Specification:

LINE OUT level: 0.41 – 0.46 V
(−5.5 – 4.5 dB)

Adjustment Location: audio board

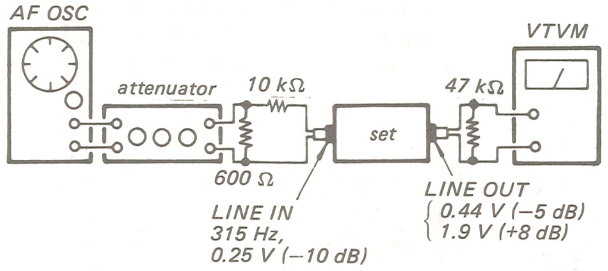

RV104
(L-CH)
RV204
(R-CH)

Level Meter Adjustment

Procedure:

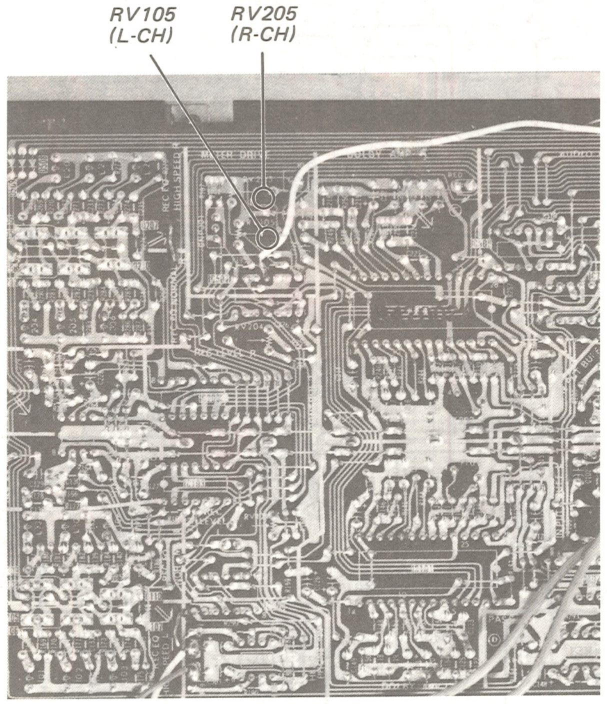
Mode: record

1. Connect Q829 base to the ground with the lead wire.


AF OSC
attenuator
10 kΩ
600 Ω
set
47 kΩ
VTVM
LINE IN
315 Hz,
0.25 V (−10 dB)
LINE OUT
0.44 V (−5 dB)
1.9 V (+8 dB)

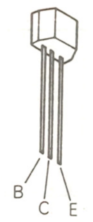
2. Set REC LEVEL control for −5 dB LINE OUT level.
3. Adjust RV105 (L-CH), RV205 (R-CH) so that level meter −4 dB segment lights up.
   Note: Adjust while increasing level.
4. Set REC LEVEL control for +8 dB LINE OUT level and confirm that all the level meters lights up.
5. Remove the lead wire in step 1.

Adjustment Location: audio board


RV105
(L-CH)
RV205
(R-CH)

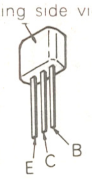
- **Semiconductor Lead Layouts**

2SB808
DTA114ES
DTA144ES
DTC114ES
DTC143TS
2SC2603F



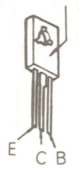
2SA1175
2SC2785E
2SD1020

Marking side view

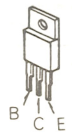


2SD414-R

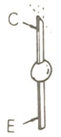
Marking side view



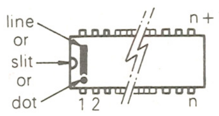
2SD1406



PH102

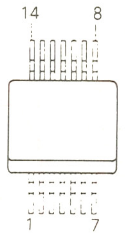


CX10035
CX20027
CX20028
HD14011BP
HD14023BP
IR2E02
M50761-412P
M50784SP
MB84011B
MB88421-160M
MB8844-1341K
NJM2043D-D
μPC4558C
μPD4001BC
μPD4066BC

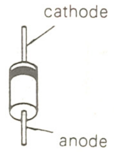

line
or
slit
or
dot
n+1
1 2
n

(Top view)

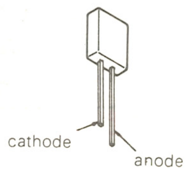
TC4066BF
TC4069UBF



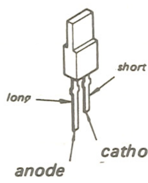
11E2
1SS202-1


cathode
anode

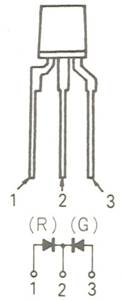
GL9ND12


cathode
anode

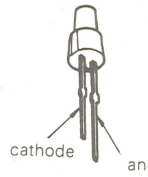
GL9NG2


long
short
anode
cathode

GL9NG260



GL9HY22

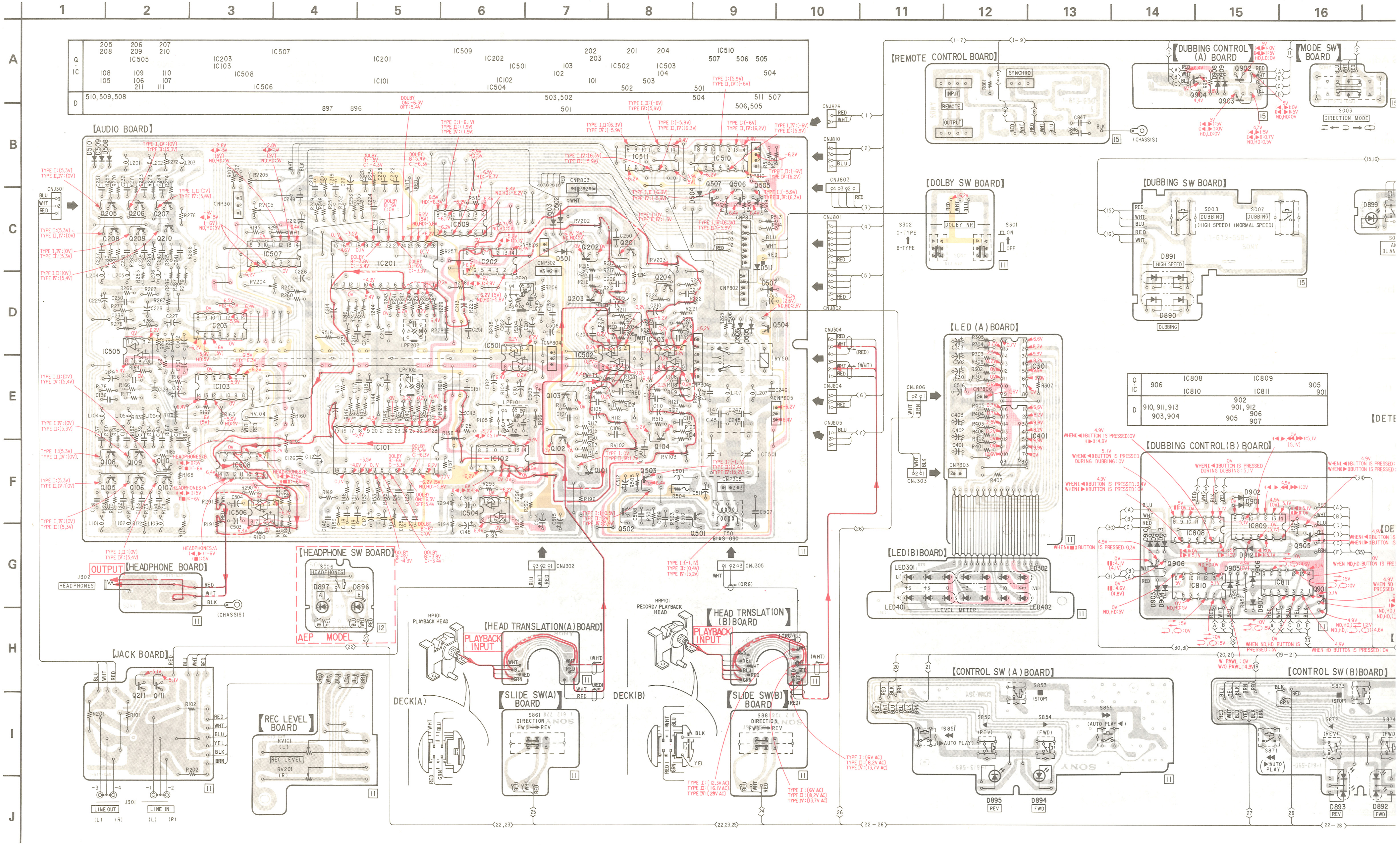

cathode
anode

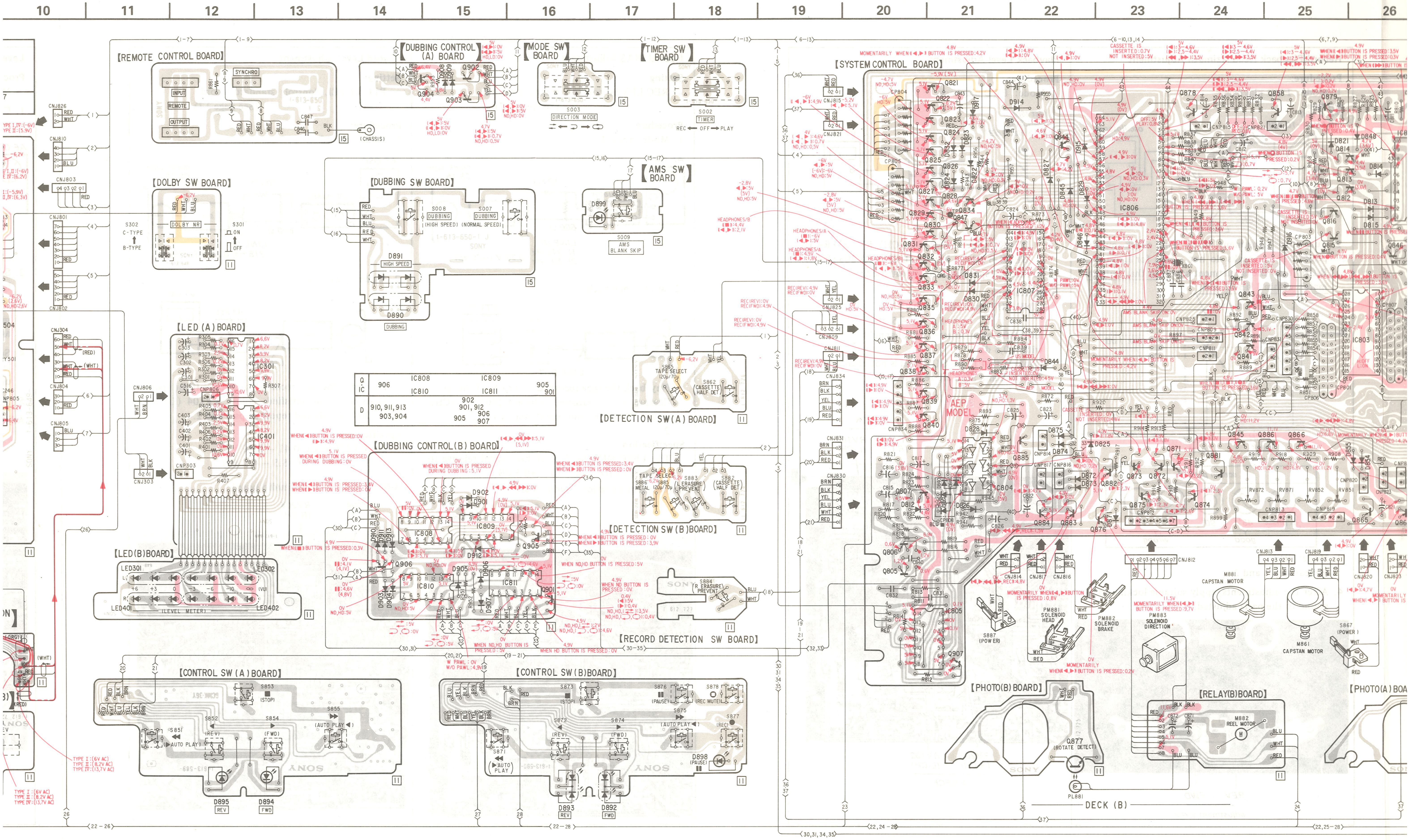
SECTION 4
DIAGRAMS

US MODEL: (Serial No. Up to 802,000)
AEP MODEL: (Serial No. Up to 500,200)

4-1. MOUNTING DIAGRAM

- See page 46 for notes.
- See page 21 for Semiconductor Lead Layouts.


1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
A
B
C
D
E
F
G
H
I
J
[AUDIO BOARD]
[REMOTE CONTROL BOARD]
SYNCHRO
INPUT
REMOTE
OUTPUT
(CHASSIS)
[DUBBING CONTROL (A) BOARD]
[MODE SW BOARD]
S003
DIRECTION MODE
[DOLBY SW BOARD]
DOLBY NR
S302
C-TYPE
B-TYPE
S301
ON
OFF
[DUBBING SW BOARD]
S008
DUBBING
(HIGH SPEED)
S007
DUBBING
(NORMAL SPEED)
D891
HIGH SPEED
D890
DUBBING
[LED (A) BOARD]
[LED (B) BOARD]
LED301
LED302
LED401
LED402
LEVEL METER
[DUBBING CONTROL (B) BOARD]
[HEADPHONE SW BOARD]
S006
HEADPHONES
D897
D896
AEP MODEL
OUTPUT
[HEADPHONE BOARD]
J302
HEADPHONES
(CHASSIS)
[JACK BOARD]
J301
LINE OUT
LINE IN
(L)
(R)
[REC LEVEL BOARD]
RV101
REC LEVEL
RV201
HP101
PLAYBACK HEAD
[HEAD TRANSLATION (A) BOARD]
PLAYBACK INPUT
DECK (A)
[SLIDE SW (A) BOARD]
S861
DIRECTION
FWD
REV
HRP101
RECORD/PLAYBACK HEAD
[HEAD TRANSLATION (B) BOARD]
PLAYBACK INPUT
DECK (B)
[SLIDE SW (B) BOARD]
S881
DIRECTION
FWD
REV
BIAS OSC
[CONTROL SW (A) BOARD]
S853
(STOP)
S851
AUTO PLAY
S852
(REV)
S854
(FWD)
S855
(AUTO PLAY)
D895
REV
D894
FWD
[CONTROL SW (B) BOARD]
S873
(STOP)
S872
(REV)
S871
AUTO PLAY
S874
(FWD)
D893
REV
D892
FWD
[DETE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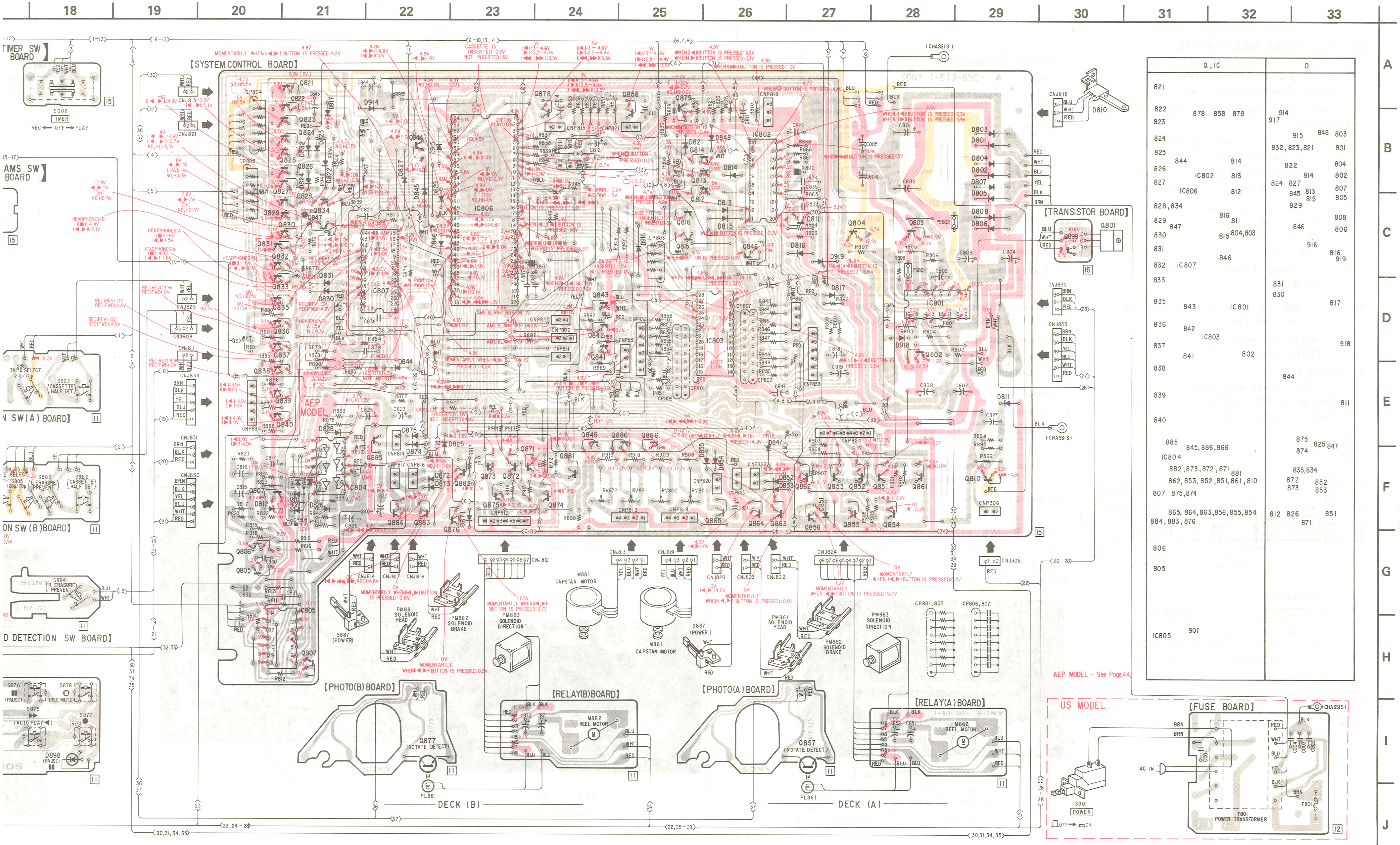
[REMOTE CONTROL BOARD]
[DUBBING CONTROL (A) BOARD]
[MODE SW BOARD]
[TIMER SW BOARD]
[SYSTEM CONTROL BOARD]
[DOLBY SW BOARD]
[DUBBING SW BOARD]
[AMS SW BOARD]
[LED (A) BOARD]
[DETECTION SW (A) BOARD]
[DUBBING CONTROL (B) BOARD]
[DETECTION SW (B) BOARD]
[LED (B) BOARD]
[RECORD DETECTION SW BOARD]
[CONTROL SW (A) BOARD]
[CONTROL SW (B) BOARD]
[PHOTO (B) BOARD]
[RELAY (B) BOARD]
[PHOTO (A) BOA
DECK (B)
AEP MODEL
S003 DIRECTION MODE
S002 TIMER
REC OFF PLAY
S009 AMS BLANK SKIP
S008 DUBBING (HIGH SPEED)
S007 DUBBING (NORMAL SPEED)
D891 HIGH SPEED
D890 DUBBING
S302 C-TYPE B-TYPE
S301 ON OFF
DOLBY NR
S865 TAPE SELECT
S862 CASSETTE HALF DET
S883 ERASURE PREVENT
S882 CASSETTE HALF DET
S884 ERASURE PREVENT
LEVEL METER
S853 (STOP)
S851 AUTO PLAY
S852 (REV)
S854 (FWD)
S855 (AUTO PLAY)
D895 REV
D894 FWD
S873 (STOP)
S876 (PAUSE)
S878 (REC MUTE)
S871 AUTO PLAY
S872 (REV)
S874 (FWD)
S875 (AUTO PLAY)
S877 (REC)
D898 (PAUSE)
D893 REV
D892 FWD
M881 CAPSTAN MOTOR
M861 CAPSTAN MOTOR
PM881 SOLENOID HEAD
PM882 SOLENOID BRAKE
PM883 SOLENOID DIRECTION
S887 (POWER)
S867 (POWER)
M882 REEL MOTOR
Q877 (ROTATE DETECT)
PL881
IC806
IC807
IC803
IC804
IC805
IC808
IC809
IC810
IC811
IC301
IC401
(CHASSIS)

Q IC	906	IC808 IC810	IC809 IC811	905 901
D	910, 911, 913 903, 904		902 901, 912 905 906 907	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H
I
J
TIMER SW BOARD
S002 TIMER
REC ← OFF → PLAY
AMS SW BOARD
SW (A) BOARD
ON SW (B) BOARD
D DETECTION SW BOARD
[SYSTEM CONTROL BOARD]
AEP MODEL
[TRANSISTOR BOARD]
Q801
D810
(CHASSIS)
SONY 1-613-650- A
IC801
IC802
IC803
IC805
IC806
IC807
M881 CAPSTAN MOTOR
M861 CAPSTAN MOTOR
S887 (POWER)
S867 (POWER)
PM881 SOLENOID HEAD
PM882 SOLENOID BRAKE
PM883 SOLENOID DIRECTION
PM861 SOLENOID HEAD
PM862 SOLENOID BRAKE
PM863 SOLENOID DIRECTION
CP801, 802
CP806, 807
[PHOTO (B) BOARD]
[RELAY (B) BOARD]
[PHOTO (A) BOARD]
[RELAY (A) BOARD]
Q877 (ROTATE DETECT)
Q857 (ROTATE DETECT)
PL881
PL861
M882 REEL MOTOR
M862 REEL MOTOR
DECK (B)
DECK (A)
AEP MODEL — See Page 44.
US MODEL
[FUSE BOARD]
S001 POWER
OFF → ON
AC IN
T801 POWER TRANSFORMER
F801
S876 (PAUSE)
S878 (REC MUTE)
S875 (AUTO PLAY)
S877 (REC)
D898 (PAUSE)
S884 (R ERASURE PREVENT)
S855 TAPE SELECT
S862 (CASSETTE HALF DET)
S883 (R ERASURE PREVENT)
S882 (CASSETTE HALF DET)

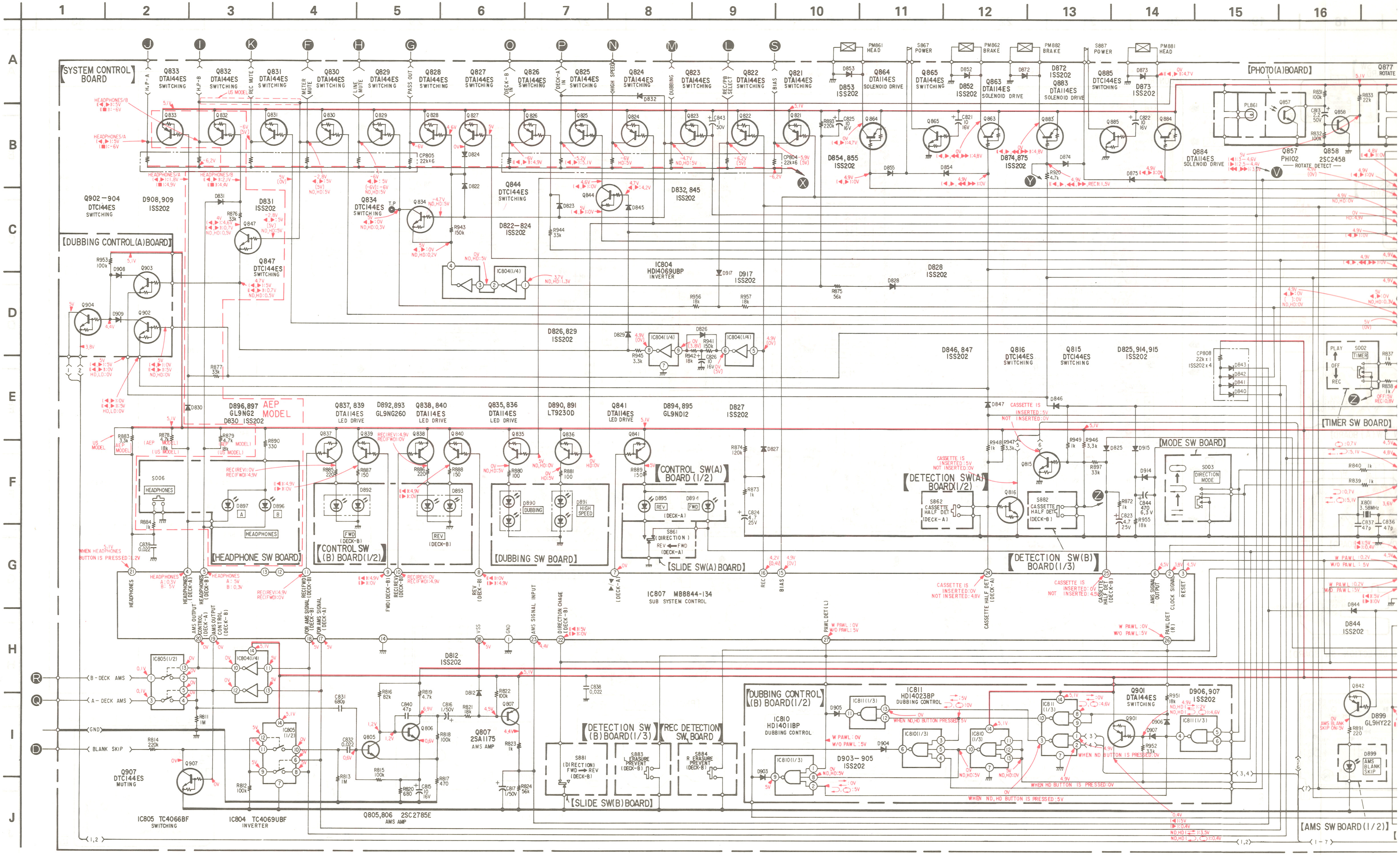
Q, IC	D
821	
822 878 858 879 823 824 825 844 814 826 IC802 813 827 IC806 812	914 917 915 848 803 832, 823, 821 801 822 804 814 802 824 827 807 845 813 815 805
828, 834 816 829 811 847 830 815 804, 803 831 846 832 IC807	829 808 846 806 916 816 919
833 835 843 IC801 836 842 IC803 837 841 802	831 830 817 918
838 839 840	844 811
885 845, 886, 866 IC804 882, 873, 872, 871 881 862, 853, 852, 851, 861, 810 807 875, 874 865, 864, 863, 856, 855, 854 884, 883, 876	875 825 847 874 835, 834 872 852 873 853 812 826 851 871
806 805	
907 IC805	

4-2. SCHEMATIC DIAGRAM – *System Control Section* –

AUDIO SECTION . . . . See page 42 to 45

US MODEL: (Serial No. Up to 802,000)
AEP MODEL: (Serial No. Up to 500,200)

TC-W7R TC-W7R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C
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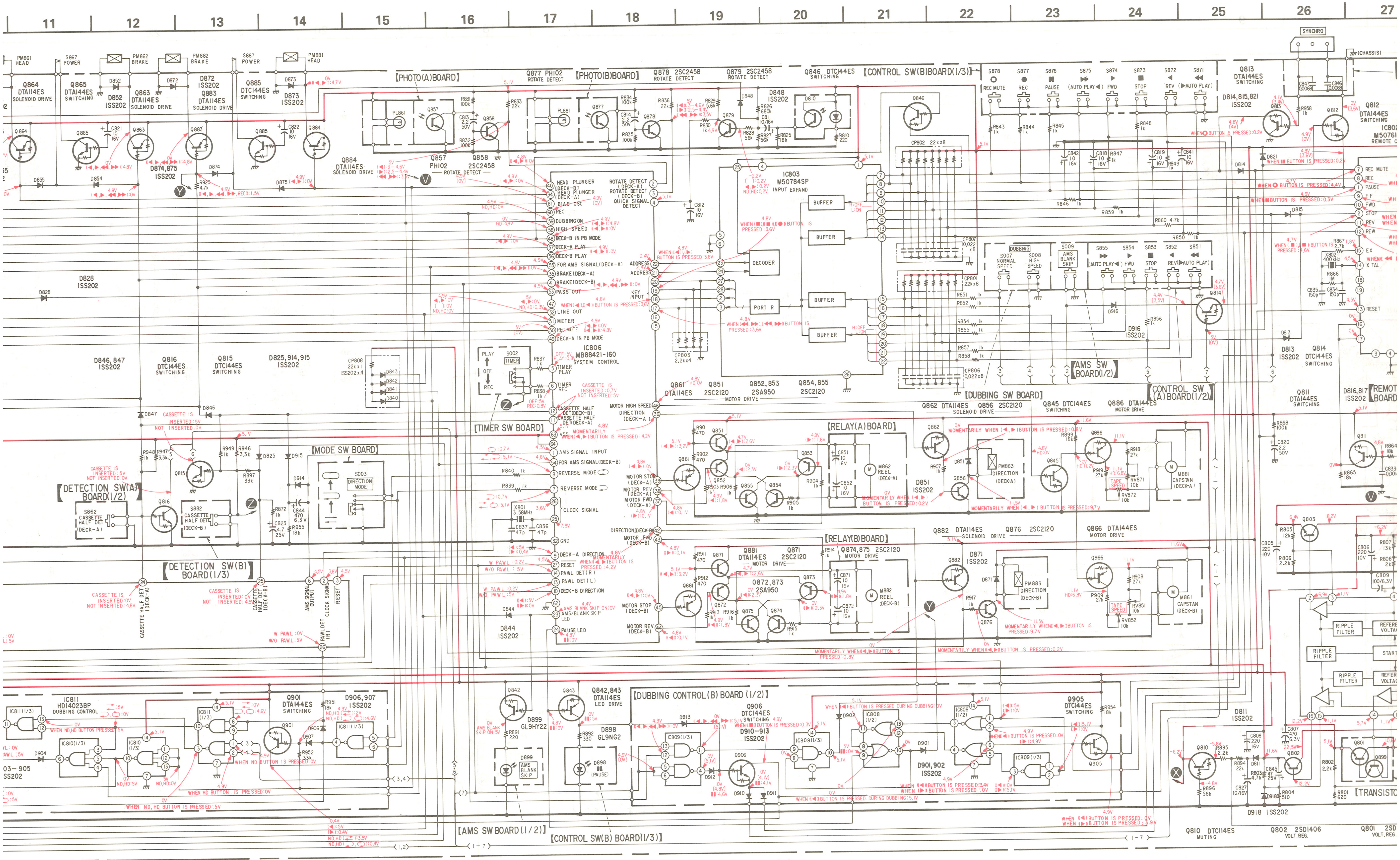
E
F
G
H
I
J
[SYSTEM CONTROL] BOARD
Q833 DTA144ES SWITCHING
Q832 DTA144ES SWITCHING
Q831 DTA144ES SWITCHING
Q830 DTA144ES SWITCHING
Q829 DTA144ES SWITCHING
Q828 DTA144ES SWITCHING
Q827 DTA144ES SWITCHING
Q826 DTA144ES SWITCHING
Q825 DTA144ES SWITCHING
Q824 DTA144ES SWITCHING
Q823 DTA144ES SWITCHING
Q822 DTA144ES SWITCHING
Q821 DTA144ES SWITCHING
PM861 HEAD
S867 POWER
PM862 BRAKE
PM882 BRAKE
S887 POWER
PM881 HEAD
D853 ISS202
Q864 DTA114ES SOLENOID DRIVE
Q865 DTA144ES SWITCHING
D852 ISS202
Q863 DTA114ES SOLENOID DRIVE
D872 ISS202
Q883 DTA114ES SOLENOID DRIVE
Q885 DTC144ES SWITCHING
D873 ISS202
[PHOTO(A)BOARD]
Q877 ROTATE
Q884 DTA114ES SOLENOID DRIVE
Q857 PH102
Q858 2SC2458
ROTATE DETECT
Q902−904 DTC144ES SWITCHING
D908, 909 ISS202
D831 ISS202
Q834 DTC144ES SWITCHING
Q844 DTC144ES SWITCHING
D822−824 ISS202
D832, 845 ISS202
D854, 855 ISS202
D874, 875 ISS202
[DUBBING CONTROL(A)BOARD]
Q847 DTC144ES SWITCHING
IC804 HD14069UBP INVERTER
IC804(1/4)
D917 ISS202
D828 ISS202
D826, 829 ISS202
D846, 847 ISS202
Q816 DTC144ES SWITCHING
Q815 DTC144ES SWITCHING
D825, 914, 915 ISS202
D896, 897 GL9NG2
AEP MODEL
D830 ISS202
Q837, 839 DTA114ES LED DRIVE
D892, 893 GL9NG260
Q838, 840 DTA114ES LED DRIVE
Q835, 836 DTA114ES LED DRIVE
D890, 891 LT9230D
Q841 DTA114ES LED DRIVE
D894, 895 GL9ND12
D827 ISS202
[TIMER SW BOARD]
S002 TIMER
PLAY OFF REC
S006 HEADPHONES
[HEADPHONE SW BOARD]
[CONTROL SW (B) BOARD(1/2)]
[DUBBING SW BOARD]
[CONTROL SW(A) BOARD (1/2)]
S861 (DIRECTION) REV FWD (DECK-A)
[SLIDE SW(A) BOARD]
[DETECTION SW(A) BOARD(1/2)]
S862 CASSETTE HALF DET (DECK-A)
S882 CASSETTE HALF DET (DECK-B)
[MODE SW BOARD]
S003 DIRECTION MODE
[DETECTION SW(B) BOARD(1/3)]
IC807 MB8844-134 SUB SYSTEM CONTROL
X801 3.58MHz
IC805(1/2)
IC804(1/4)
B-DECK AMS
A-DECK AMS
GND
BLANK SKIP
D812 ISS202
Q807 2SA1175 AMS AMP
Q907 DTC144ES MUTING
IC805 TC4066BF SWITCHING
IC804 TC4069UBF INVERTER
Q805,806 2SC2785E AMS AMP
[DETECTION SW (B) BOARD(1/3)]
S881 (DIRECTION) FWD REV (DECK-B)
[REC DETECTION SW BOARD]
S883 L ERASURE PREVENT (DECK-B)
S884 R ERASURE PREVENT (DECK-B)
[SLIDE SW(B) BOARD]
[DUBBING CONTROL (B) BOARD(1/2)]
IC810 HD14011BP DUBBING CONTROL
IC811 HD14023BP DUBBING CONTROL
D903−905 ISS202
Q901 DTA114ES SWITCHING
D906, 907 ISS202
D844 ISS202
Q842
D899 GL9HY22
S001 AMS BLANK SKIP
[AMS SW BOARD(1/2)]
CASSETTE IS INSERTED: 5V NOT INSERTED: 0V
WHEN HEADPHONES BUTTON IS PRESSED: 1.2V
WHEN HD BUTTON IS PRESSED: 0V
WHEN ND, HD BUTTON IS PRESSED: 5V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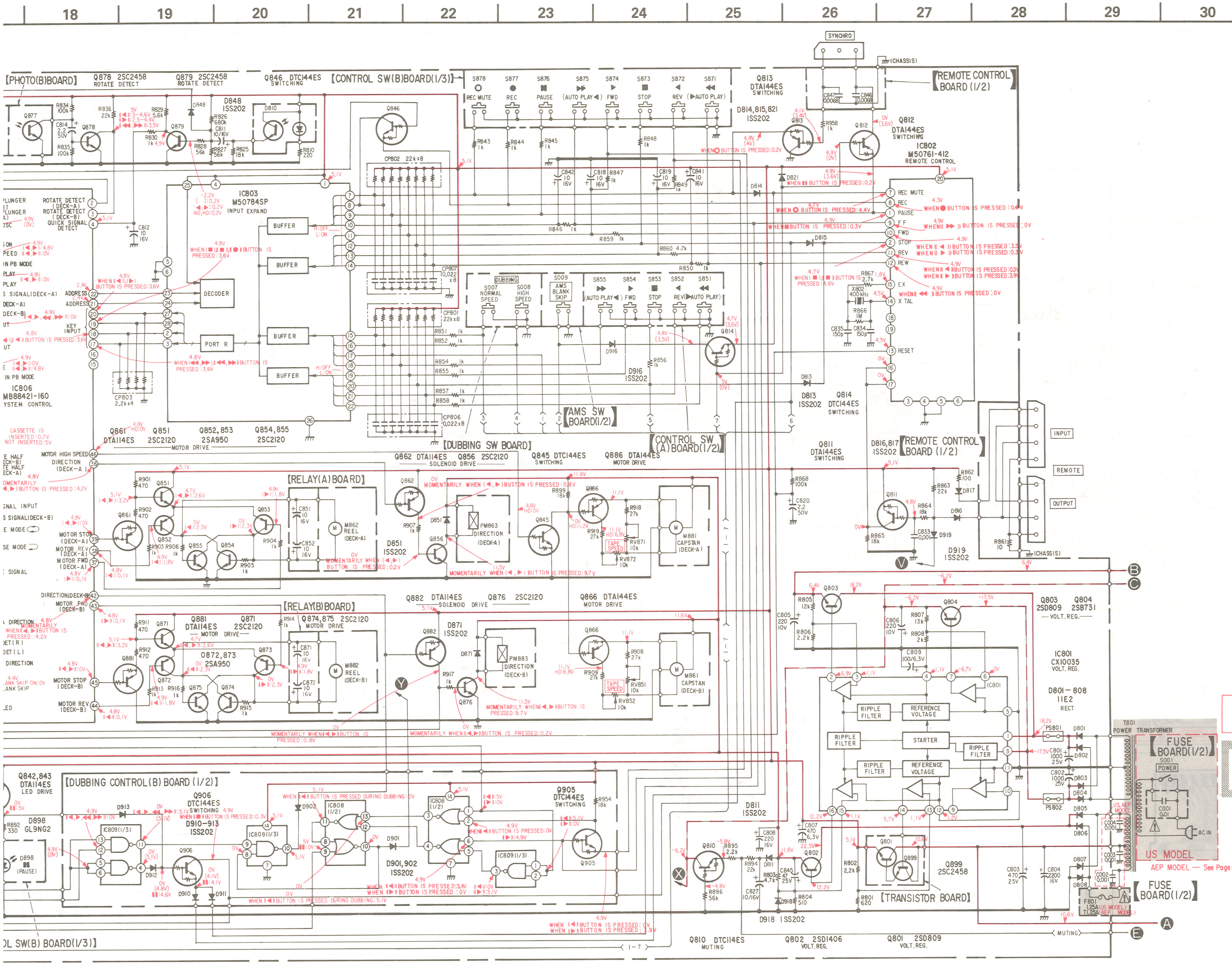
27
[PHOTO(A)BOARD]
[PHOTO(B)BOARD]
[CONTROL SW(B)BOARD(1/3)]
IC803 M50784SP INPUT EXPAND
BUFFER
DECODER
PORT R
IC806 MB88421-160 SYSTEM CONTROL
[TIMER SW BOARD]
[MODE SW BOARD]
[DETECTION SW(A) BOARD(1/2)]
[DETECTION SW(B) BOARD(1/3)]
[DUBBING SW BOARD]
[AMS SW BOARD(1/2)]
[CONTROL SW (A) BOARD(1/2)]
[RELAY(A)BOARD]
[RELAY(B)BOARD]
[DUBBING CONTROL(B) BOARD(1/2)]
IC811 HD14023BP DUBBING CONTROL
[AMS SW BOARD(1/2)]
[CONTROL SW(B) BOARD(1/3)]
[REMOTE BOARD]
[TRANSISTOR]
SYNCHRO
(CHASSIS)
RIPPLE FILTER
REFERENCE VOLTAGE
START
Q810 DTC114ES MUTING
Q802 2SD1406 VOLT. REG.
Q801 2SD VOLT. REG.


18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33
[PHOTO(B)BOARD]
[CONTROL SW(B)BOARD(1/3)]
REMOTE CONTROL BOARD (1/2)
IC803 M50784SP INPUT EXPAND
IC806 MB88421-160 SYSTEM CONTROL
IC802 M50761-412 REMOTE CONTROL
[DUBBING SW BOARD]
[AMS SW BOARD(1/2)]
CONTROL SW (A) BOARD(1/2)
[RELAY(A)BOARD]
[RELAY(B)BOARD]
[DUBBING CONTROL(B) BOARD (1/2)]
[TRANSISTOR BOARD]
FUSE BOARD(1/2)
IC801 CX10035 VOLT. REG.
T801 POWER TRANSFORMER
US MODEL
AEP MODEL — See Page 44.
SYNCHRO
INPUT
REMOTE
OUTPUT
MUTING
AC IN

Note:

- All capacitors are in μF unless otherwise noted. pF: μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- Components for right channel have same values as for left channel. Reference numbers are coded from 200.
- ━━ : B+ bus.
- ╍╍ : B– bus.
- ▭ : adjustment for repair.
- AC voltage readings in the bias oscillator with a VTVM.
- Voltages are dc with respect to ground unless otherwise noted.
- Readings are taken under no-signal conditions with a VOM (50 kΩ/V).
  ( ) : DECK-A
  (( )): DECK-B
  ▶ : FWD
  ◀ : REV
  ▶▶ : FF
  ◀◀ : REW
  ■ : STOP
  ● : REC
  [ ] : REC
  ND : NORMAL SPEED DUBBING
  HD : HIGH SPEED DUBBING
- Voltage variations may be noted due to normal production tolerances.
- Switch

Ref. No.	Switch	Position
S001	POWER	OFF
S002	TIMER	OFF
S003	DIRECTION MODE	⇄
S006	HEADPHONES-A/B	—
S007	DUBBING-NORM SPEED	OFF
S008	DUBBING-HIGH SPEED	OFF
S009	AMS BLANK SKIP	OFF
S851, 871	REW	B
S852, 872	REV.	OFF
S853, 873	STOP	OFF
S854, 874	FWD	OFF
S855, 875	FF	OFF
S861, 881	DIRECTION	OFF
S877	REC	OFF
S878	REC MUTE	OFF
S882	CASSETTE DIRECT	OFF
S883	ERASUER PREVENSION	OFF

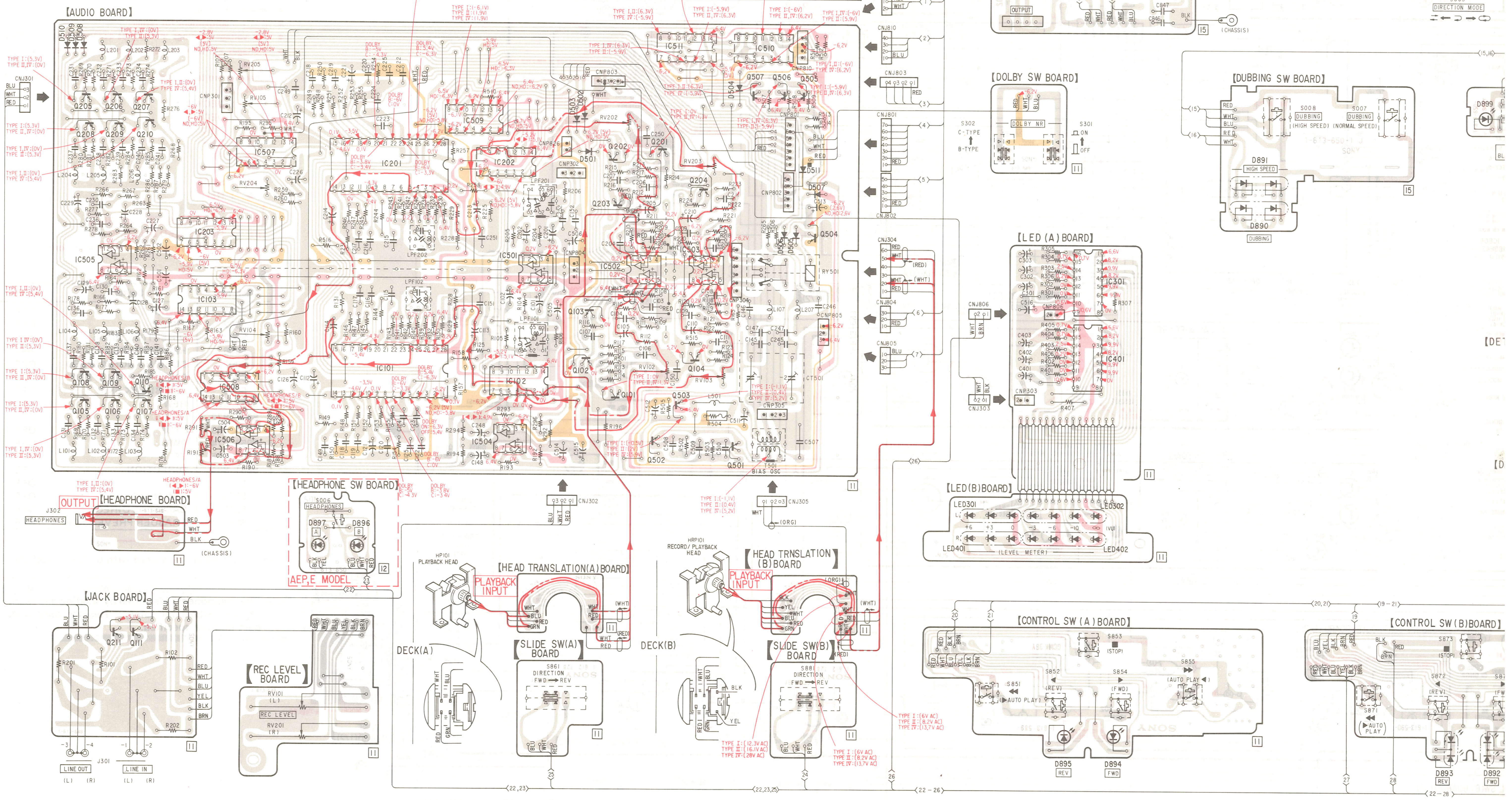
Note: Voltages are measured with a VOM (50kΩ/V).

Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

4-3. MOUNTING DIAGRAM

US MODEL: (Serial No. 802,001 and later)
AEP MODEL: (Serial No. 500,201 and later)
E MODEL: (Applicable for all sets)

	1	2	3	4	5	6	7	8	9	10
Q·IC		205 208 206 209 207 210 IC505 108 105 109 106 211 110 107 111	IC203 IC103 IC508 IC506	IC507	IC201 IC101	IC509 IC202 IC102 IC504	IC501 103 102 202 203 101	201 IC502 502 204 IC503 104 503	IC510 507 506 505 501	504
D	510, 509, 508			897	896		503, 502 501		504 506, 505 511	507



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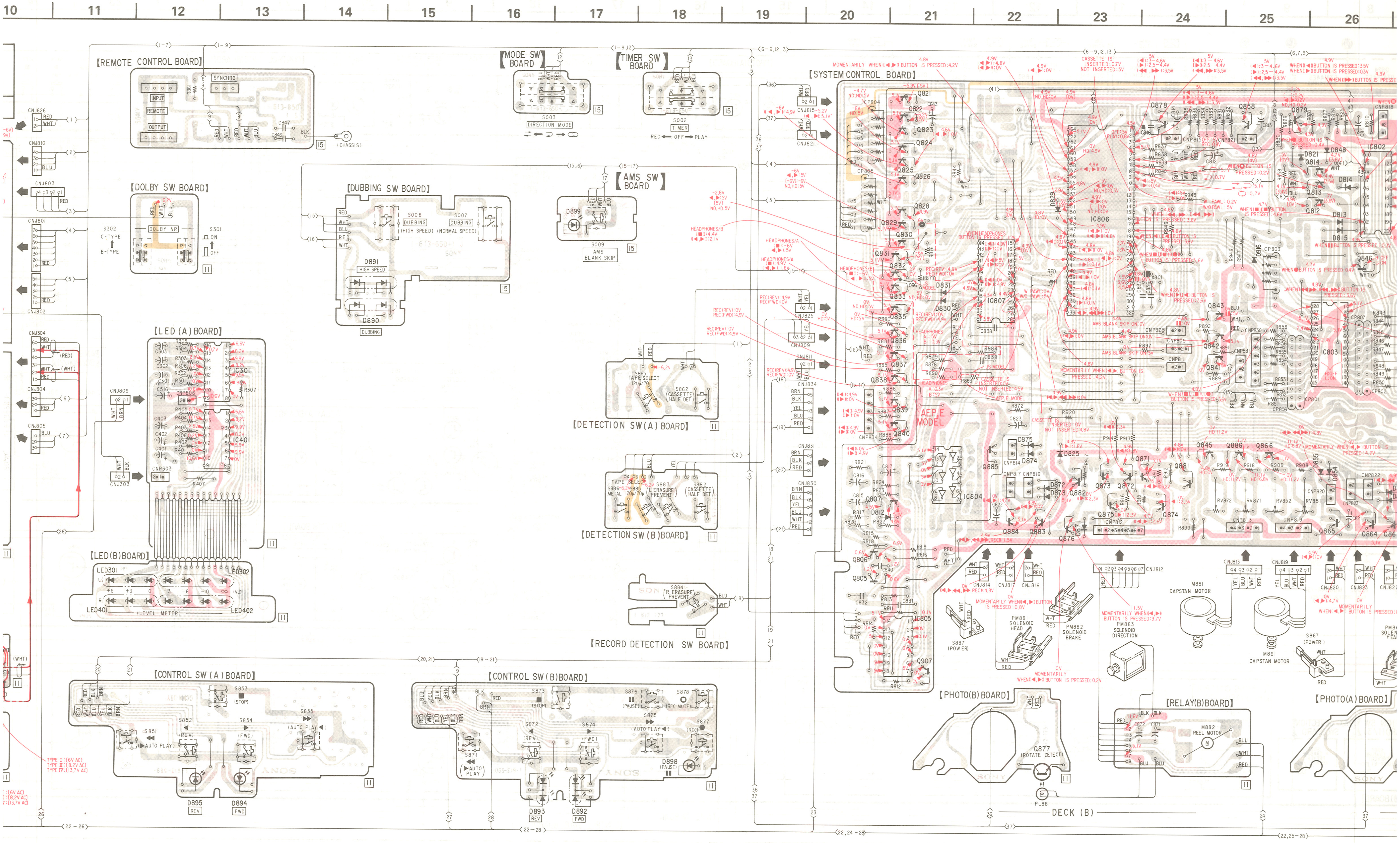
I
J
[AUDIO BOARD]
[REMOTE CONTROL BOARD]
[MODE SW BOARD]
S003
DIRECTION MODE
[DOLBY SW BOARD]
S302
C-TYPE
B-TYPE
S301
ON
OFF
[DUBBING SW BOARD]
S008
DUBBING
(HIGH SPEED)
S007
DUBBING
(NORMAL SPEED)
D891
HIGH SPEED
D890
DUBBING
[LED (A) BOARD]
IC301
IC401
[LED (B) BOARD]
LED301
LED302
LED401
LED402
(LEVEL METER)
[HEADPHONE SW BOARD]
S006
HEADPHONES
D897
D896
AEP, E MODEL
OUTPUT
[HEADPHONE BOARD]
J302
HEADPHONES
(CHASSIS)
[JACK BOARD]
J301
LINE OUT
LINE IN
(L)
(R)
[REC LEVEL BOARD]
RV101
(L)
REC LEVEL
RV201
(R)
HP101
PLAYBACK HEAD
[HEAD TRANSLATION (A) BOARD]
PLAYBACK INPUT
DECK(A)
[SLIDE SW(A) BOARD]
S861
DIRECTION
FWD → REV
HRP101
RECORD/PLAYBACK HEAD
[HEAD TRNSLATION (B) BOARD]
PLAYBACK INPUT
DECK(B)
[SLIDE SW(B) BOARD]
S881
DIRECTION
FWD → REV
[CONTROL SW (A) BOARD]
S853
(STOP)
S851
(AUTO PLAY)
S852
(REV)
S854
(FWD)
S855
(AUTO PLAY)
D895
REV
D894
FWD
[CONTROL SW (B) BOARD]
S873
(STOP)
S872
(REV)
S871
(AUTO PLAY)
D893
REV
D892
FWD
T501
BIAS OSC
RY501
TYPE I:(6V AC)
TYPE II:(8.2V AC)
TYPE IV:(13.7V AC)
TYPE I:(12.3V AC)
TYPE II:(16.1V AC)
TYPE IV:(28V AC)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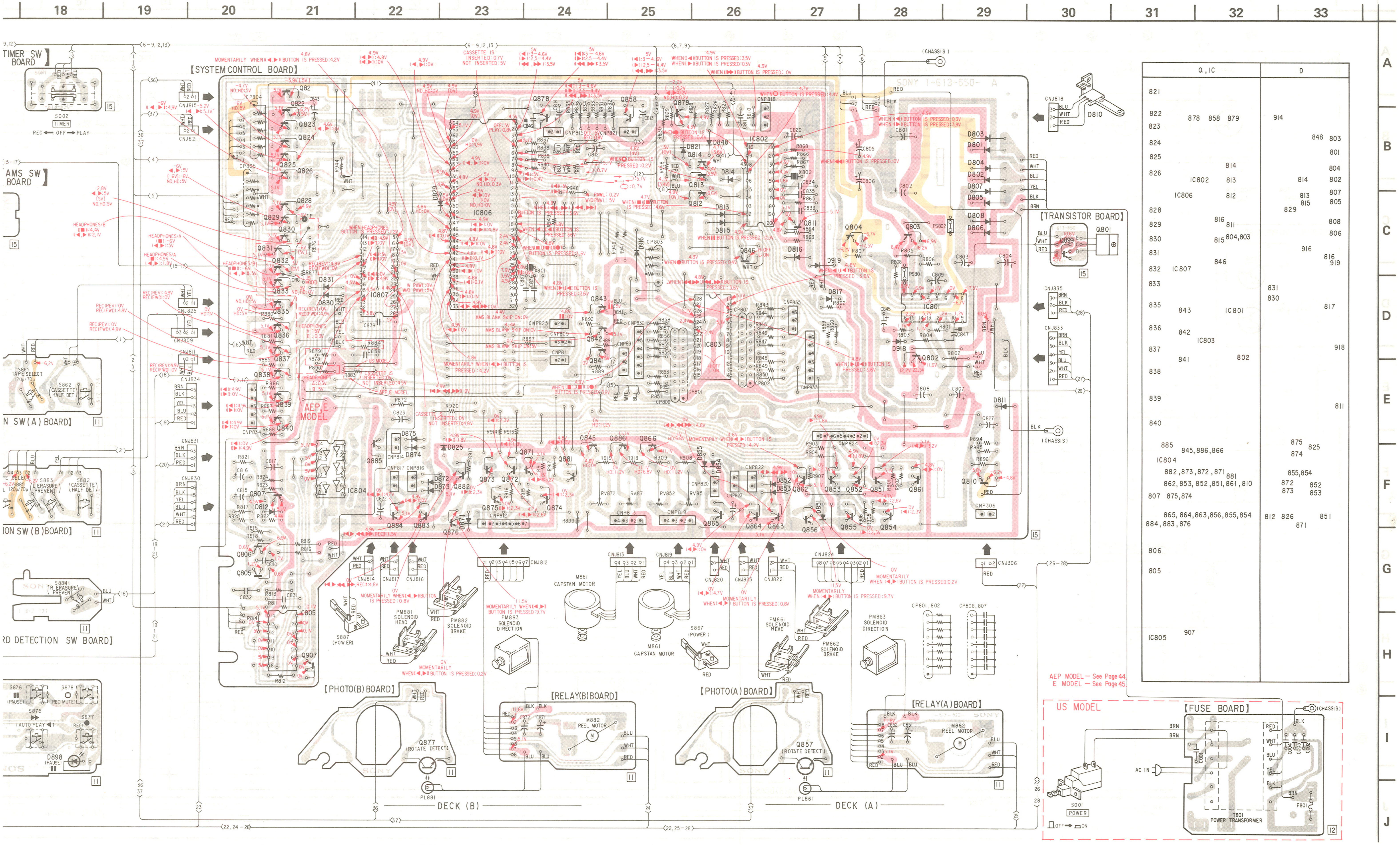
[REMOTE CONTROL BOARD]
INPUT
REMOTE
OUTPUT
SYNCHRO
(CHASSIS)
[MODE SW BOARD]
S003
DIRECTION MODE
[TIMER SW BOARD]
S002
TIMER
REC ← OFF → PLAY
[SYSTEM CONTROL BOARD]
[DOLBY SW BOARD]
DOLBY NR
S302
C-TYPE
B-TYPE
S301
ON
OFF
[DUBBING SW BOARD]
S008
DUBBING
(HIGH SPEED)
S007
DUBBING
(NORMAL SPEED)
D891
HIGH SPEED
D890
DUBBING
[AMS SW BOARD]
D899
S009
AMS
BLANK SKIP
[LED (A) BOARD]
IC301
IC401
[LED(B)BOARD]
LED301
LED302
LED401
LED402
(LEVEL METER)
(VU)
[DETECTION SW(A) BOARD]
S865
TAPE SELECT
S862
CASSETTE HALF DET
[DETECTION SW (B)BOARD]
S883
ERASURE PREVENT
S882
CASSETTE HALF DET
S884
R ERASURE PREVENT
[RECORD DETECTION SW BOARD]
[CONTROL SW (A) BOARD]
S853
(STOP)
S852
(REV)
S854
(FWD)
S855
(AUTO PLAY)
S851
AUTO PLAY
D895
REV
D894
FWD
[CONTROL SW (B)BOARD]
S873
(STOP)
S876
(PAUSE)
S878
(REC MUTE)
S872
(REV)
S874
(FWD)
S875
(AUTO PLAY)
S877
(REC)
S871
AUTO PLAY
D898
(PAUSE)
D893
REV
D892
FWD
IC806
IC807
IC805
IC804
IC803
IC802
AEP,E MODEL
[PHOTO(B) BOARD]
Q877
(ROTATE DETECT)
PL881
DECK (B)
[RELAY(B)BOARD]
M882
REEL MOTOR
M881
CAPSTAN MOTOR
M861
CAPSTAN MOTOR
S887
(POWER)
S867
(POWER)
PM881
SOLENOID
HEAD
PM882
SOLENOID
BRAKE
PM883
SOLENOID
DIRECTION
[PHOTO(A) BOARD]
TYPE I:(6V AC)
TYPE II:(8.2V AC)
TYPE IV:(13.7V AC)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E
F
G
H
I
J
TIMER SW BOARD
S002 TIMER
REC ← OFF → PLAY
AMS SW BOARD
【SYSTEM CONTROL BOARD】
SONY 1-613-650-
【TRANSISTOR BOARD】
N SW (A) BOARD
ION SW (B) BOARD
RD DETECTION SW BOARD
AEP,E MODEL
【PHOTO(B) BOARD】
【RELAY(B) BOARD】
【PHOTO(A) BOARD】
【RELAY(A) BOARD】
DECK (B)
DECK (A)
M881 CAPSTAN MOTOR
M861 CAPSTAN MOTOR
PM881 SOLENOID HEAD
PM882 SOLENOID BRAKE
PM883 SOLENOID DIRECTION
PM861 SOLENOID HEAD
PM862 SOLENOID BRAKE
PM863 SOLENOID DIRECTION
M882 REEL MOTOR
M862 REEL MOTOR
Q877 (ROTATE DETECT)
Q857 (ROTATE DETECT)
PL881
PL861
S867 (POWER)
S887 (POWER)
IC801
IC802
IC803
IC804
IC805
IC806
IC807
(CHASSIS)
【FUSE BOARD】
S001 POWER
T801 POWER TRANSFORMER
F801
AC IN
OFF → ON

US MODEL

AEP MODEL — See Page 44.
E MODEL — See Page 45.

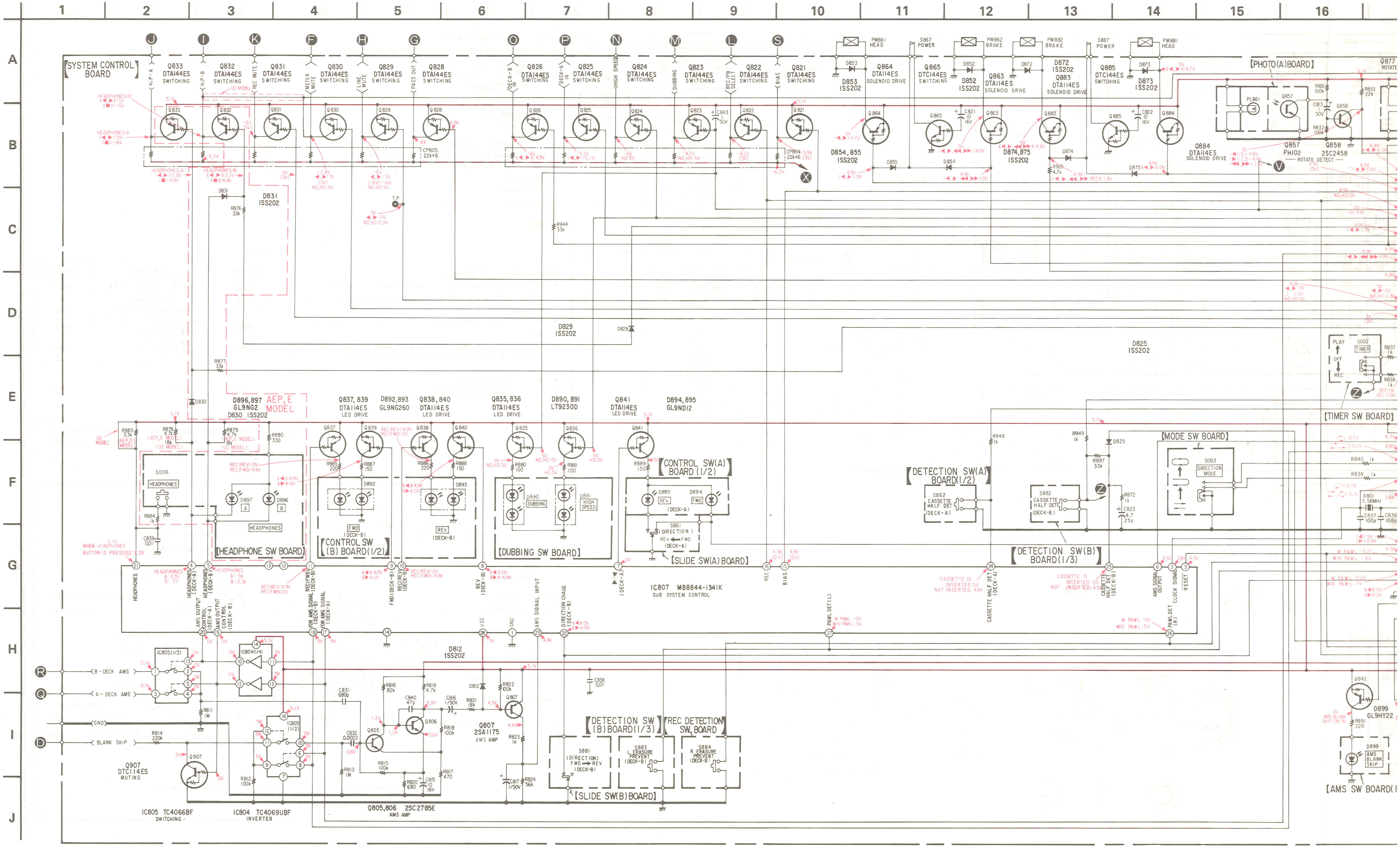
Q , IC	D
821	
822 878 858 879	914
823	
824	848 803
825	801
814	804
826 IC802 813	814 802
IC806 812	813 807 815 805
828	829
829 816 811	808
830 815 804,803	806
831	916
846	816 919
832 IC807	
833	831 830
835 843 IC801	817
836 842 IC803	
837	918
841 802	
838	
839	811
840	
885 845,886,866	875 825
IC804	874
882,873,872,871 881	855,854
862,853,852,851,861,810	872 852
807 875,874	873 853
865,864,863,856,855,854	812 826 851
884,883,876	871
806	
805	
IC805 907	

4-4. SCHEMATIC DIAGRAM *— System Control Section —*

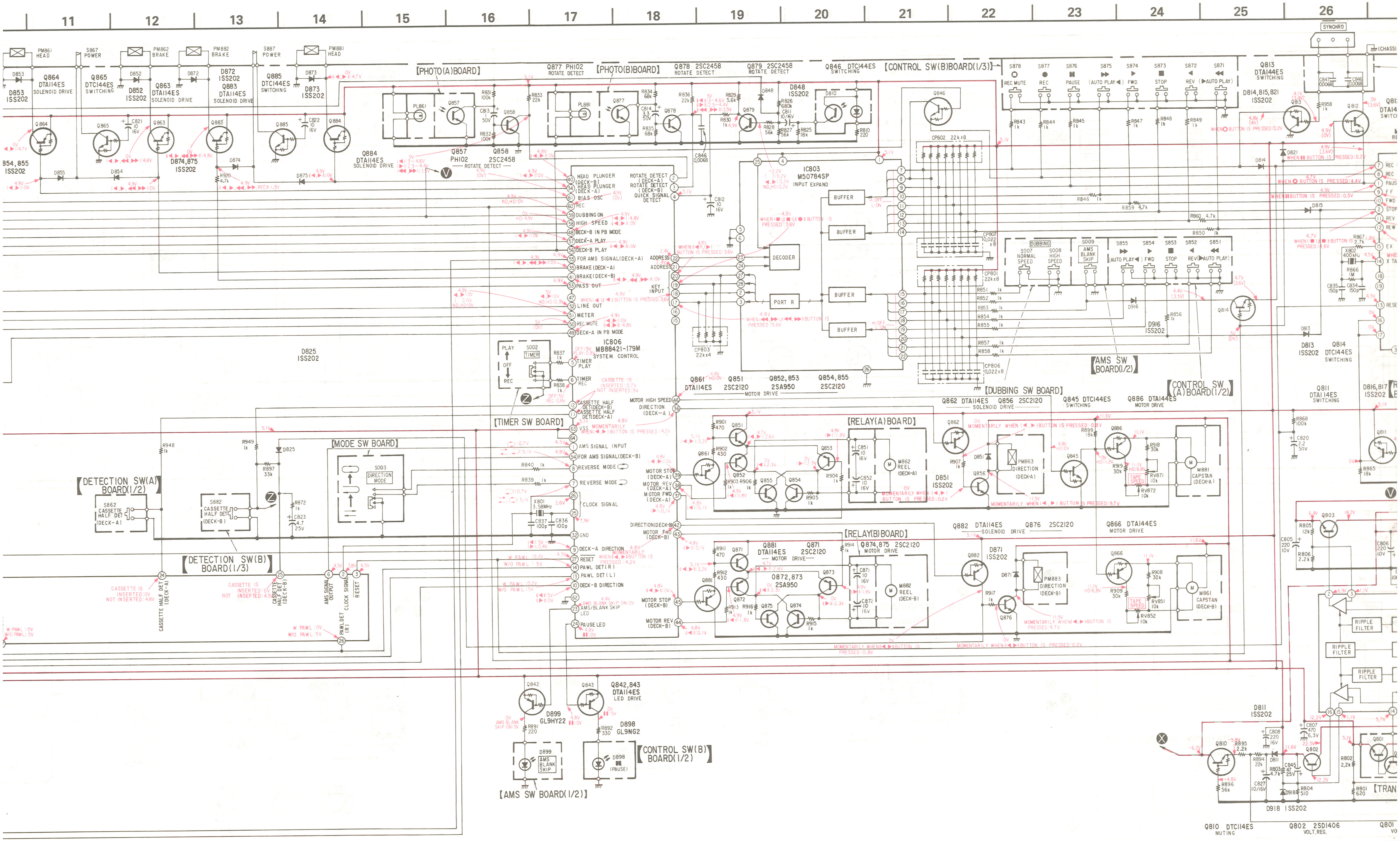
AUDIO SECTION . . . . See page 42 to 45

US MODEL: (Serial No. 802,001 and later)
AEP MODEL: (Serial No. 500,201 and later)
E MODEL: (Applicable for all sets)

TC-W7R TC-W7R



SYSTEM CONTROL BOARD
Q833 DTA144ES SWITCHING
Q832 DTA144ES SWITCHING
Q831 DTA144ES SWITCHING
Q830 DTA144ES SWITCHING
Q829 DTA144ES SWITCHING
Q828 DTA144ES SWITCHING
Q826 DTA144ES SWITCHING
Q825 DTA144ES SWITCHING
Q824 DTA144ES SWITCHING
Q823 DTA144ES SWITCHING
Q822 DTA144ES SWITCHING
Q821 DTA144ES SWITCHING
D853 ISS202
Q864 DTA144ES SOLENOID DRIVE
Q865 DTC144ES SWITCHING
D852 ISS202
Q863 DTA114ES SOLENOID DRIVE
D872 ISS202
Q883 DTA114ES SOLENOID DRIVE
Q885 DTC144ES SWITCHING
D873 ISS202
PHOTO (A) BOARD
PM861 HEAD
S867 POWER
PM862 BRAKE
PM882 BRAKE
S887 POWER
PM881 HEAD
D854, 855 ISS202
D874, 875 ISS202
Q884 DTA114ES SOLENOID DRIVE
Q857 PHI02
Q858 2SC2458
ROTATE DETECT
D831 ISS202
D829 ISS202
D825 ISS202
D830
D896, 897 GL9NG2
D830 ISS202
AEP, E MODEL
Q837, 839 DTA114ES LED DRIVE
D892, 893 GL9NG260
Q838, 840 DTA114ES LED DRIVE
Q835, 836 DTA114ES LED DRIVE
D890, 891 LT9230D
Q841 DTA114ES LED DRIVE
D894, 895 GL9ND12
HEADPHONE SW BOARD
CONTROL SW (B) BOARD (1/2)
DUBBING SW BOARD
CONTROL SW (A) BOARD (1/2)
SLIDE SW (A) BOARD
DETECTION SW (A) BOARD (1/2)
DETECTION SW (B) BOARD (1/3)
MODE SW BOARD
TIMER SW BOARD
IC807 MB8844-1341K SUB SYSTEM CONTROL
D812 ISS202
Q807 2SA1175 AMS AMP
DETECTION SW (B) BOARD (1/3)
REC DETECTION SW BOARD
SLIDE SW (B) BOARD
Q907 DTC114ES MUTING
IC805 TC4066BF SWITCHING
IC804 TC4069UBF INVERTER
Q805, 806 2SC2785E AMS AMP
Q842
D899 GL9HY22
AMS SW BOARD
B-DECK AMS
A-DECK AMS
GND
BLANK SKIP


11
12
13
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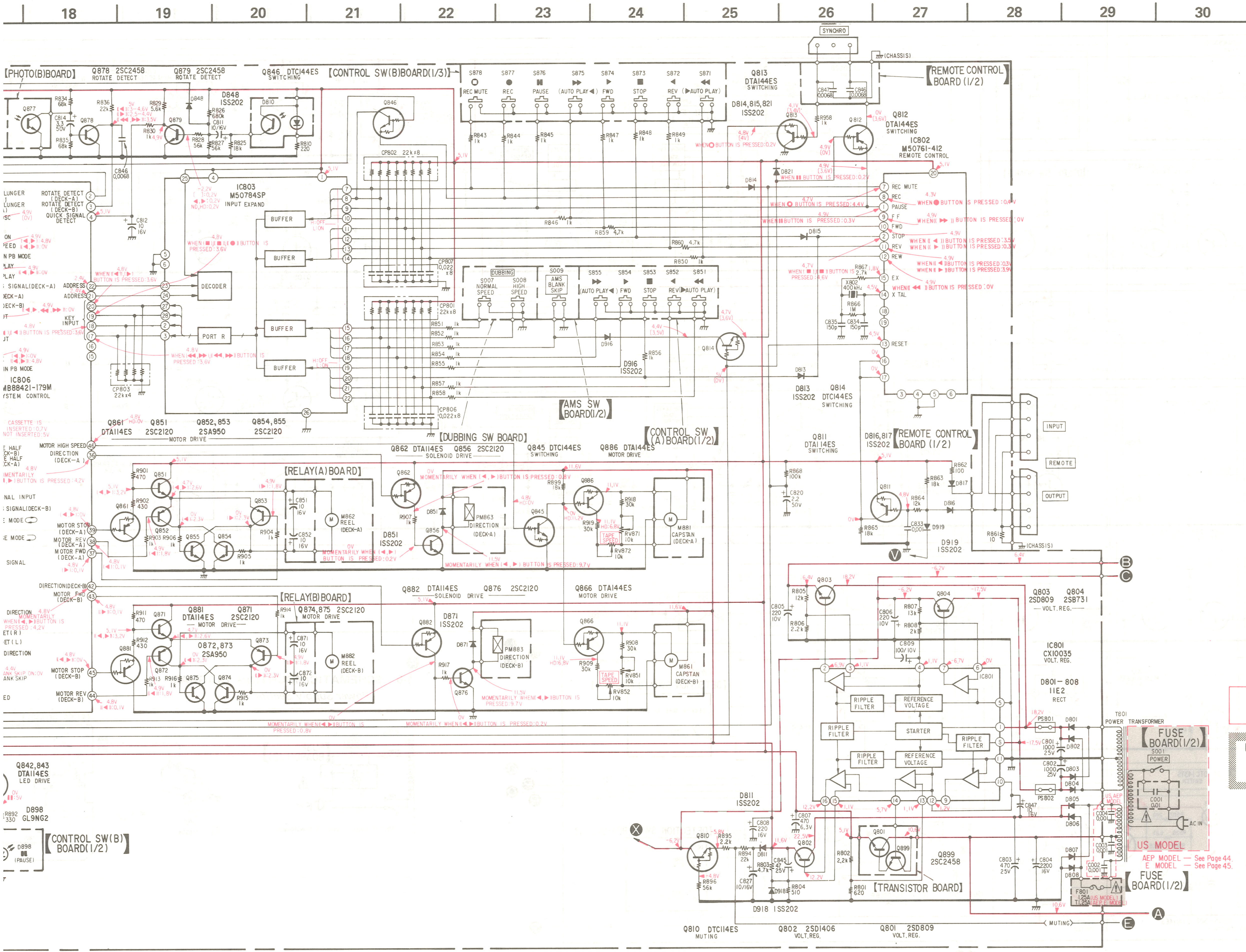
16
17
18
19
20
21
22
23
24
25
26
PM861 HEAD
S867 POWER
PM862 BRAKE
PM882 BRAKE
S887 POWER
PM881 HEAD
Q864 DTA114ES SOLENOID DRIVE
Q865 DTC144ES SWITCHING
Q863 DTA114ES SOLENOID DRIVE
Q885 DTC144ES SWITCHING
D872 1SS202
Q883 DTA114ES SOLENOID DRIVE
D873 1SS202
D853 1SS202
D852 1SS202
D854,855 1SS202
D874,875 1SS202
Q884 DTA114ES SOLENOID DRIVE
Q857 PH102
Q858 2SC2458 ROTATE DETECT
[PHOTO(A)BOARD]
[PHOTO(B)BOARD]
Q877 PH102 ROTATE DETECT
Q878 2SC2458 ROTATE DETECT
Q879 2SC2458 ROTATE DETECT
D848 1SS202
Q846 DTC144ES SWITCHING
[CONTROL SW(B)BOARD(1/3)]
S878 REC MUTE
S877 REC
S876 PAUSE
S875 (AUTO PLAY◀) FWD
S874 FWD
S873 STOP
S872 REV
S871 (▶AUTO PLAY)
Q813 DTA144ES SWITCHING
D814,815,821 1SS202
SYNCHRO
IC803 M50784SP INPUT EXPAND
BUFFER
DECODER
PORT R
IC806 M88421-179M SYSTEM CONTROL
HEAD PLUNGER (DECK-B)
HEAD PLUNGER (DECK-A)
BIAS OSC
REC
DUBBING ON
HIGH SPEED
DECK-B IN PB MODE
DECK-A PLAY
DECK-B PLAY
FOR AMS SIGNAL(DECK-A)
BRAKE(DECK-A)
BRAKE(DECK-B)
PASS OUT
LINE OUT
METER
REC MUTE
DECK-A IN PB MODE
ROTATE DETECT (DECK-A)
ROTATE DETECT (DECK-B)
QUICK SIGNAL DETECT
ADDRESS
KEY INPUT
TIMER PLAY
TIMER REC
CASSETTE HALF DET(DECK-B)
CASSETTE HALF DET(DECK-A)
VSS MOMENTARILY
AMS SIGNAL INPUT
FOR AMS SIGNAL(DECK-B)
REVERSE MODE
CLOCK SIGNAL
GND
DECK-A DIRECTION
RESET
PAWL DET(R)
PAWL DET(L)
DECK-B DIRECTION
AMS/BLANK SKIP LED
PAUSE LED
MOTOR HIGH SPEED
DIRECTION (DECK-A)
MOTOR STOP (DECK-A)
MOTOR REV (DECK-A)
MOTOR FWD (DECK-A)
DIRECTION(DECK-B)
MOTOR FWD (DECK-B)
MOTOR STOP (DECK-B)
MOTOR REV (DECK-B)
D825 1SS202
[TIMER SW BOARD]
S002 TIMER PLAY OFF REC
[MODE SW BOARD]
S003 DIRECTION MODE
X801 3.58MHz
[DETECTION SW(A) BOARD(1/2)]
S862 CASSETTE HALF DET (DECK-A)
S882 CASSETTE HALF DET (DECK-B)
[DETECTION SW(B) BOARD(1/3)]
CASSETTE IS INSERTED:0V NOT INSERTED:4.8V
CASSETTE HALF DET (DECK-A)
CASSETTE HALF DET (DECK-B)
AMS SIGNAL OUTPUT
CLOCK SIGNAL
RESET
PAWL DET (R)
W PAWL : 0V W/O PAWL : 5V
Q861 DTA114ES
Q851 2SC2120
Q852,853 2SA950 MOTOR DRIVE
Q854,855 2SC2120
[RELAY(A)BOARD]
M862 REEL (DECK-A)
D851 1SS202
Q862 DTA114ES
Q856 2SC2120 SOLENOID DRIVE
PM863 DIRECTION (DECK-A)
Q845 DTC144ES SWITCHING
Q886 DTA144ES MOTOR DRIVE
M861 CAPSTAN (DECK-A)
TAPE SPEED
[RELAY(B)BOARD]
Q881 DTA114ES
Q871 2SC2120 MOTOR DRIVE
Q874,875 2SC2120 MOTOR DRIVE
Q872,873 2SA950
M882 REEL (DECK-B)
Q882 DTA114ES
Q876 2SC2120 SOLENOID DRIVE
D871 1SS202
PM883 DIRECTION (DECK-B)
Q866 DTA144ES MOTOR DRIVE
M881 CAPSTAN (DECK-B)
[DUBBING SW BOARD]
S007 NORMAL SPEED
S008 HIGH SPEED
S009 AMS BLANK SKIP
S855 (AUTO PLAY◀)
S854 FWD
S853 STOP
S852 REV
S851 (▶AUTO PLAY)
[AMS SW BOARD(1/2)]
[CONTROL SW (A)BOARD(1/2)]
D916 1SS202
D813 1SS202
Q814 DTC144ES SWITCHING
Q811 DTA114ES SWITCHING
D816,817 1SS202
X802 400kHz
Q842,843 DTA114ES LED DRIVE
D899 GL9HY22
D898 GL9NG2
D899 AMS BLANK SKIP
D898 (PAUSE)
[AMS SW BOARD(1/2)]
[CONTROL SW(B) BOARD(1/2)]
RIPPLE FILTER
D811 1SS202
D918 1SS202
Q810 DTC114ES MUTING
Q802 2SD1406 VOLT.REG.
[TRAN


18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
A
B
C
D
E
F
G
H
I
J
[PHOTO(B)BOARD]
Q878 2SC2458 ROTATE DETECT
Q879 2SC2458 ROTATE DETECT
Q846 DTC144ES SWITCHING
[CONTROL SW(B)BOARD(1/3)]
S878 REC MUTE
S877 REC
S876 PAUSE
S875 (AUTO PLAY◄)
S874 FWD
S873 STOP
S872 REV
S871 (►AUTO PLAY)
Q813 DTA144ES SWITCHING
D814,815,821 ISS202
SYNCHRO
(CHASSIS)
[REMOTE CONTROL BOARD (1/2)]
Q812 DTA144ES SWITCHING
IC802 M50761-412 REMOTE CONTROL
D848 ISS202
IC803 M50784SP INPUT EXPAND
BUFFER
DECODER
PORT R
CP802 22k×8
CP807 0.022×8
CP801 22k×8
CP806 0.022×8
CP803 22k×4
DUBBING
S007 NORMAL SPEED
S008 HIGH SPEED
S009 AMS BLANK SKIP
S855 (AUTO PLAY◄)
S854 FWD
S853 STOP
S852 REV
S851 (►AUTO PLAY)
D916 ISS202
[AMS SW BOARD(1/2)]
[DUBBING SW BOARD]
[CONTROL SW (A) BOARD(1/2)]
IC806 MB88421-179M SYSTEM CONTROL
Q861 DTA114ES
Q851 2SC2120
Q852,853 2SA950
Q854,855 2SC2120 MOTOR DRIVE
Q862 DTA114ES
Q856 2SC2120 SOLENOID DRIVE
Q845 DTC144ES SWITCHING
Q886 DTA144ES MOTOR DRIVE
D813 ISS202
Q814 DTC144ES SWITCHING
Q811 DTA114ES SWITCHING
D816,817 ISS202
[REMOTE CONTROL BOARD (1/2)]
INPUT
REMOTE
OUTPUT
[RELAY(A)BOARD]
M862 REEL (DECK-A)
PM863 DIRECTION (DECK-A)
D851 ISS202
M881 CAPSTAN (DECK-A)
TAPE SPEED
[RELAY(B)BOARD]
Q882 DTA114ES
Q876 2SC2120 SOLENOID DRIVE
Q866 DTA144ES MOTOR DRIVE
Q881 DTA114ES
Q871 2SC2120 MOTOR DRIVE
Q872,873 2SA950
Q874,875 2SC2120 MOTOR DRIVE
D871 ISS202
M882 REEL (DECK-B)
PM883 DIRECTION (DECK-B)
M861 CAPSTAN (DECK-B)
Q842,843 DTA114ES LED DRIVE
D898 GL9NG2
[CONTROL SW(B) BOARD(1/2)]
Q803 2SD809
Q804 2SB731 VOLT. REG.
IC801 CX10035 VOLT. REG.
D801–808 11E2 RECT
RIPPLE FILTER
REFERENCE VOLTAGE
STARTER
T801 POWER TRANSFORMER
[FUSE BOARD(1/2)]
S001 POWER
AC IN
US MODEL
AEP MODEL — See Page 44
E MODEL — See Page 45
[FUSE BOARD(1/2)]
F801
D811 ISS202
D918 ISS202
[TRANSISTOR BOARD]
Q899 2SC2458
Q810 DTC114ES MUTING
Q802 2SD1406 VOLT. REG.
Q801 2SD809 VOLT. REG.
MUTING

Note:

- All capacitors are in μF unless otherwise noted. pF: μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- Components for right channel have same values as for left channel. Reference numbers are coded from 200.
- ▬▬ : B+ bus.
- ▬ ▬ ▬ : B– bus.
- ☐ : adjustment for repair.
- AC voltage readings in the bias oscillator with a VTVM.
- Voltages are dc with respect to ground unless otherwise noted.
- Readings are taken under no-signal conditions with a VOM (50 kΩ/V).

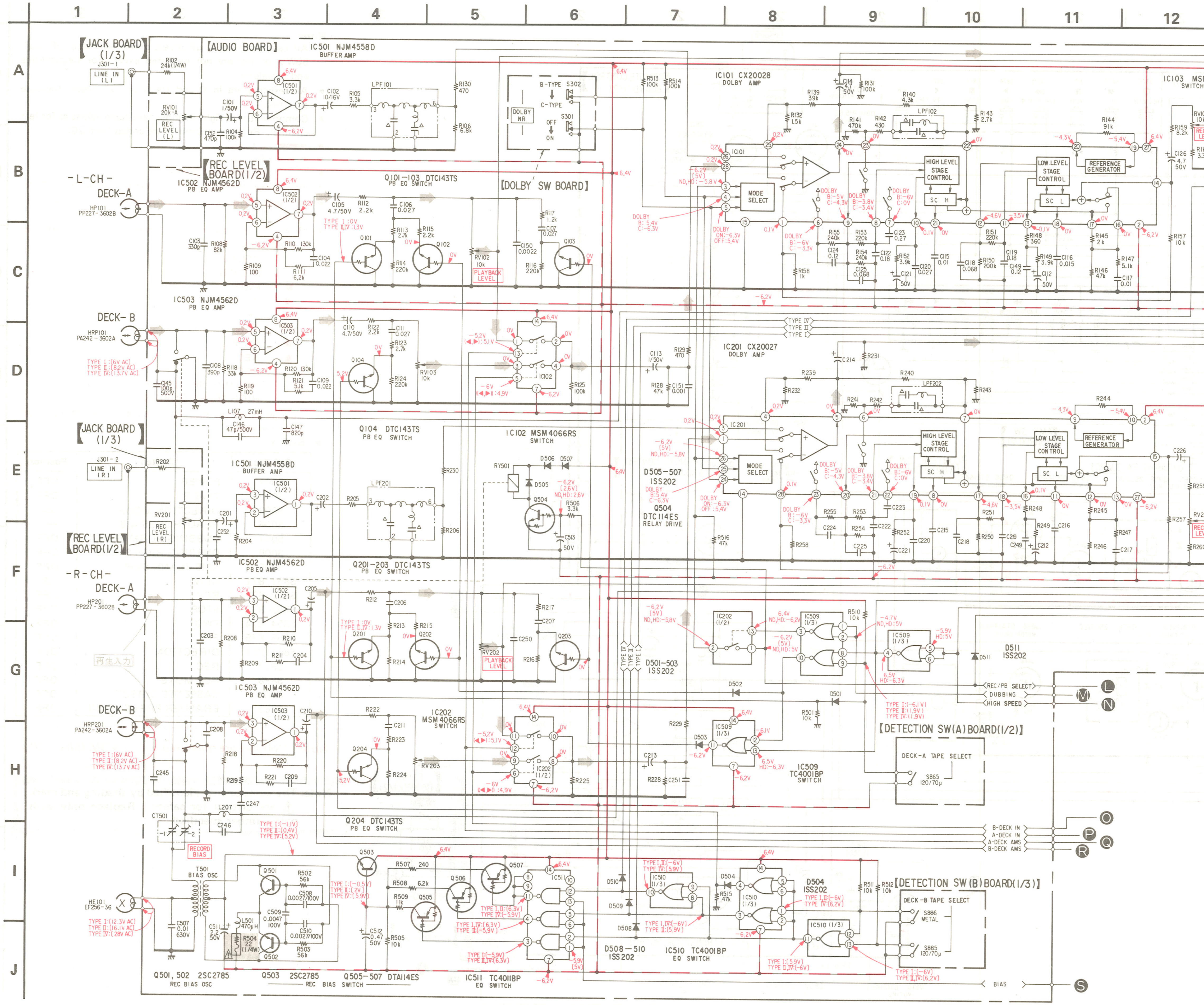
  ( ) : DECK-A
  (( )) : DECK-B
  ► : FWD
  ◄ : REV
  ►► : FF
  ◄◄ : REW
  ■ : STOP
  ● : REC
  [ ] : REC
  ND : NORMAL SPEED DUBBING
  HD : HIGH SPEED DUBBING
- Voltage variations may be noted due to normal production tolerances.
- Switch

Ref. No.	Switch	Position
S001	POWER	OFF
S002	TIMER	OFF
S003	DIRECTION MODE	⇄
S006	HEADPHONES-A/B	—
S007	DUBBING-NORM SPEED	OFF
S008	DUBBING-HIGH SPEED	OFF
S009	AMS BLANK SKIP	OFF
S851, 871	REW	B
S852, 872	REV.	OFF
S853, 873	STOP	OFF
S854, 874	FWD	OFF
S855, 875	FF	OFF
S861, 881	DIRECTION	OFF
S877	REC	OFF
S878	REC MUTE	OFF
S882	CASSETTE DIRECT	OFF
S883	ERASUER PREVENSION	OFF

Note: Voltages are measured with a VOM (50kΩ/V).

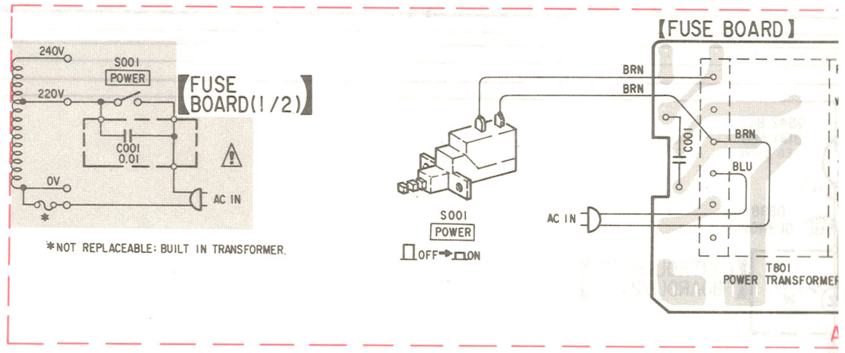
Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

4-5. SCHEMATIC DIAGRAM – *Audio Section* –

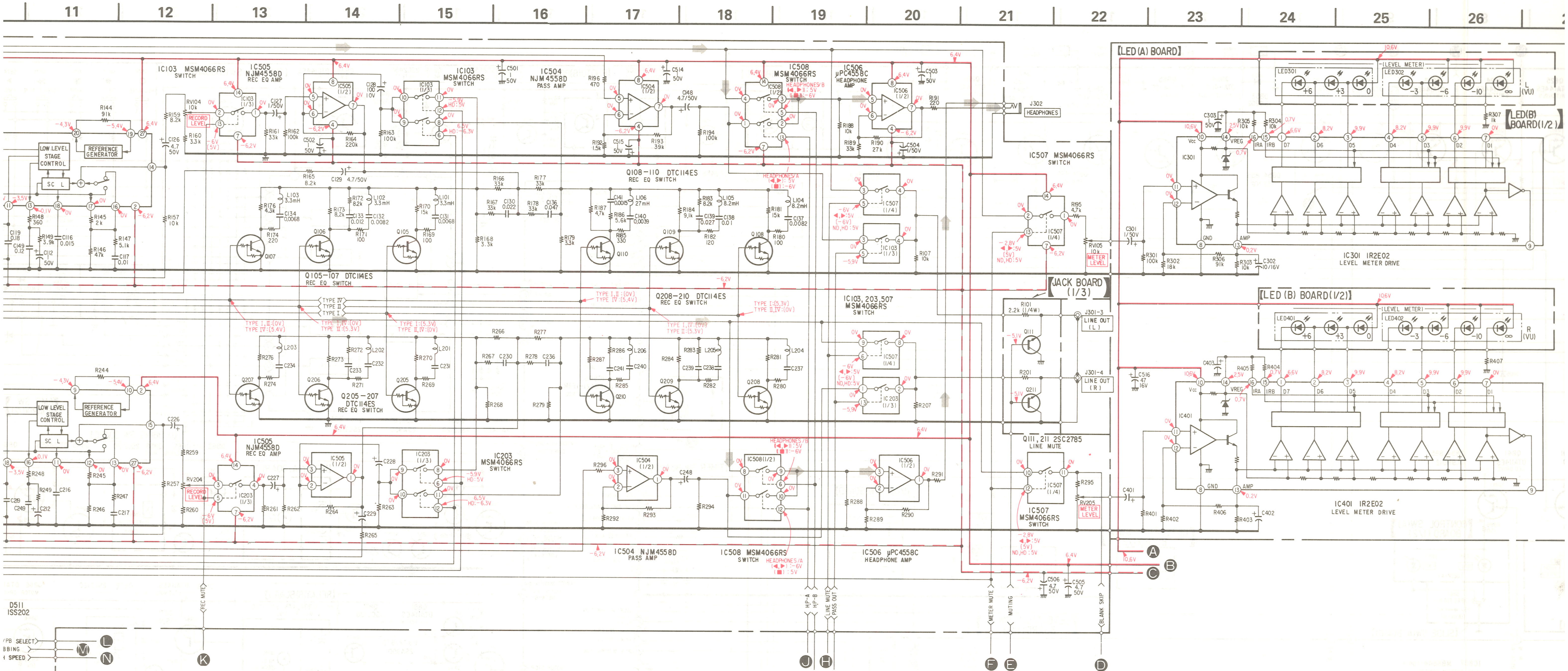

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
A B C D E F G H I J
JACK BOARD (1/3)
LINE IN (L)
J301-1
AUDIO BOARD
IC501 NJM4558D BUFFER AMP
LPF101
B-TYPE S302
C-TYPE
DOLBY NR
S301 OFF ON
DOLBY SW BOARD
REC LEVEL BOARD (1/2)
IC502 NJM4562D PB EQ AMP
Q101-103 DTC143TS PB EQ SWITCH
- L-CH -
DECK-A
HP101 PP227-3602B
DECK-B
HRP101 PA242-3602A
TYPE I:(6V AC)
TYPE II:(8.2V AC)
TYPE IV:(13.7V AC)
IC503 NJM4562D PB EQ AMP
PLAYBACK LEVEL
RV102
RV103
IC102
Q104 DTC143TS PB EQ SWITCH
IC102 MSM4066RS SWITCH
JACK BOARD (1/3)
LINE IN (R)
J301-2
IC501 NJM4558D BUFFER AMP
LPF201
RY501
D505-507 1SS202
Q504 DTC114ES RELAY DRIVE
REC LEVEL BOARD (1/2)
- R-CH -
DECK-A
HP201 PP227-3602B
IC502 NJM4562D PB EQ AMP
Q201-203 DTC143TS PB EQ SWITCH
再生入力
RV202
DECK-B
HRP201 PA242-3602A
IC503 NJM4562D PB EQ AMP
IC202 MSM4066RS SWITCH
Q204 DTC143TS PB EQ SWITCH
CT501
RECORD BIAS
T501 BIAS OSC
HE101 EF256-36
TYPE I:(12.3V AC)
TYPE II:(16.1V AC)
TYPE IV:(28V AC)
Q501, 502 2SC2785 REC BIAS OSC
Q503 2SC2785 REC BIAS SWITCH
Q505-507 DTA114ES
IC511 TC4011BP EQ SWITCH
D501-503 1SS202
D508-510 1SS202
IC510 TC4001BP EQ SWITCH
D504 1SS202
IC509 TC4001BP SWITCH
DETECTION SW(A) BOARD(1/2)
DECK-A TAPE SELECT
S865 120/70μ
DETECTION SW(B) BOARD(1/3)
DECK-B TAPE SELECT
S886 METAL
S885 120/70μ
D511 1SS202
REC/PB SELECT
DUBBING
HIGH SPEED
B-DECK IN
A-DECK IN
A-DECK AMS
B-DECK AMS
BIAS
L M N O P Q R S K
IC101 CX20028 DOLBY AMP
MODE SELECT
HIGH LEVEL STAGE CONTROL
LOW LEVEL STAGE CONTROL
REFERENCE GENERATOR
SC H
SC L
IC201 CX20027 DOLBY AMP
IC103 MSM4066RS SWITCH
IC505 NJM4558D REC EQ AMP
IC504 NJM4558D PASS AMP
RECORD LEVEL
RV104
RV204
Q105-107 DTC114ES REC EQ SWITCH
Q205-207 DTC114ES REC EQ SWITCH
IC203 MSM4066RS SWITCH
TYPE IV
TYPE II
TYPE I
REC MUTE

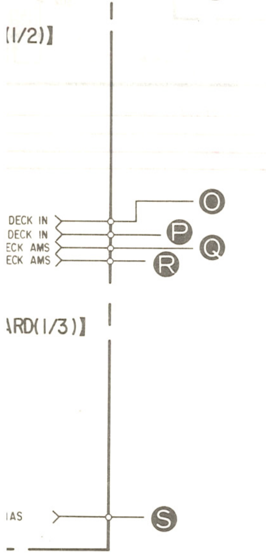
4-6. SCHEMATIC/MOUNTING DIAGRAM

– *Power Supply Section* –


240V
220V
S001 POWER
C001 0.01
FUSE BOARD (1/2)
AC IN
0V
FUSE BOARD
BRN
BRN
BLU
S001 POWER
OFF ON
AC IN
T801 POWER TRANSFORMER

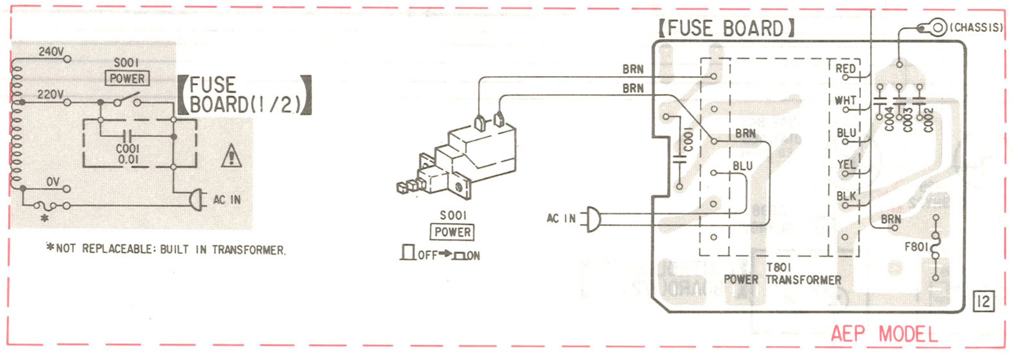
＊NOT REPLACEABLE: BUILT IN TRANSFORMER.

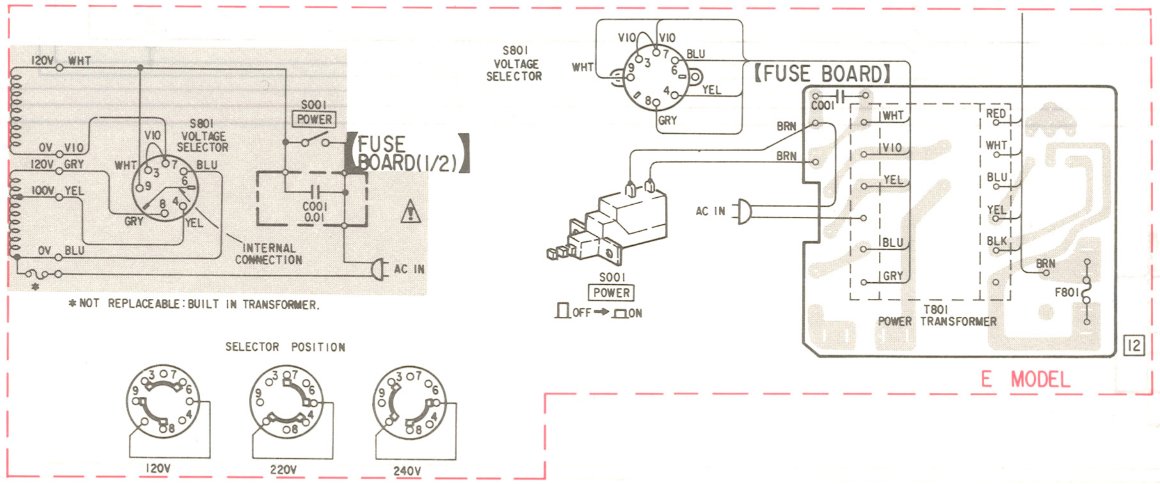

IC103 MSM4066RS SWITCH
IC505 NJM4558D REC EQ AMP
IC504 NJM4558D PASS AMP
IC508 MSM4066RS SWITCH
IC506 μPC4558C HEADPHONE AMP
J302 HEADPHONES
IC507 MSM4066RS SWITCH
LOW LEVEL STAGE CONTROL
REFERENCE GENERATOR
RECORD LEVEL
Q108–110 DTC114ES REC EQ SWITCH
Q105–107 DTC114ES REC EQ SWITCH
Q208–210 DTC114ES REC EQ SWITCH
Q205–207 DTC114ES REC EQ SWITCH
IC103, 203, 507 MSM4066RS SWITCH
IC203 MSM4066RS SWITCH
IC504 NJM4558D PASS AMP
IC508 MSM4066RS SWITCH
IC506 μPC4558C HEADPHONE AMP
IC505 NJM4558D REC EQ AMP
LED(A) BOARD
LEVEL METER
LED(B) BOARD(1/2)
IC301 IR2E02 LEVEL METER DRIVE
JACK BOARD (1/3)
J301-3 LINE OUT (L)
J301-4 LINE OUT (R)
Q111, 211 2SC2785 LINE MUTE
IC507 MSM4066RS SWITCH
LED(B) BOARD(1/2)
IC401 IR2E02 LEVEL METER DRIVE
METER LEVEL
REC MUTE
H/P-A
H/P-B
LINE MUTE
PASS OUT
METER MUTE
MUTING
BLANK SKIP
D511 1SS202
A
B
C
D
E
F
G
H
I
J
K
L
M
N

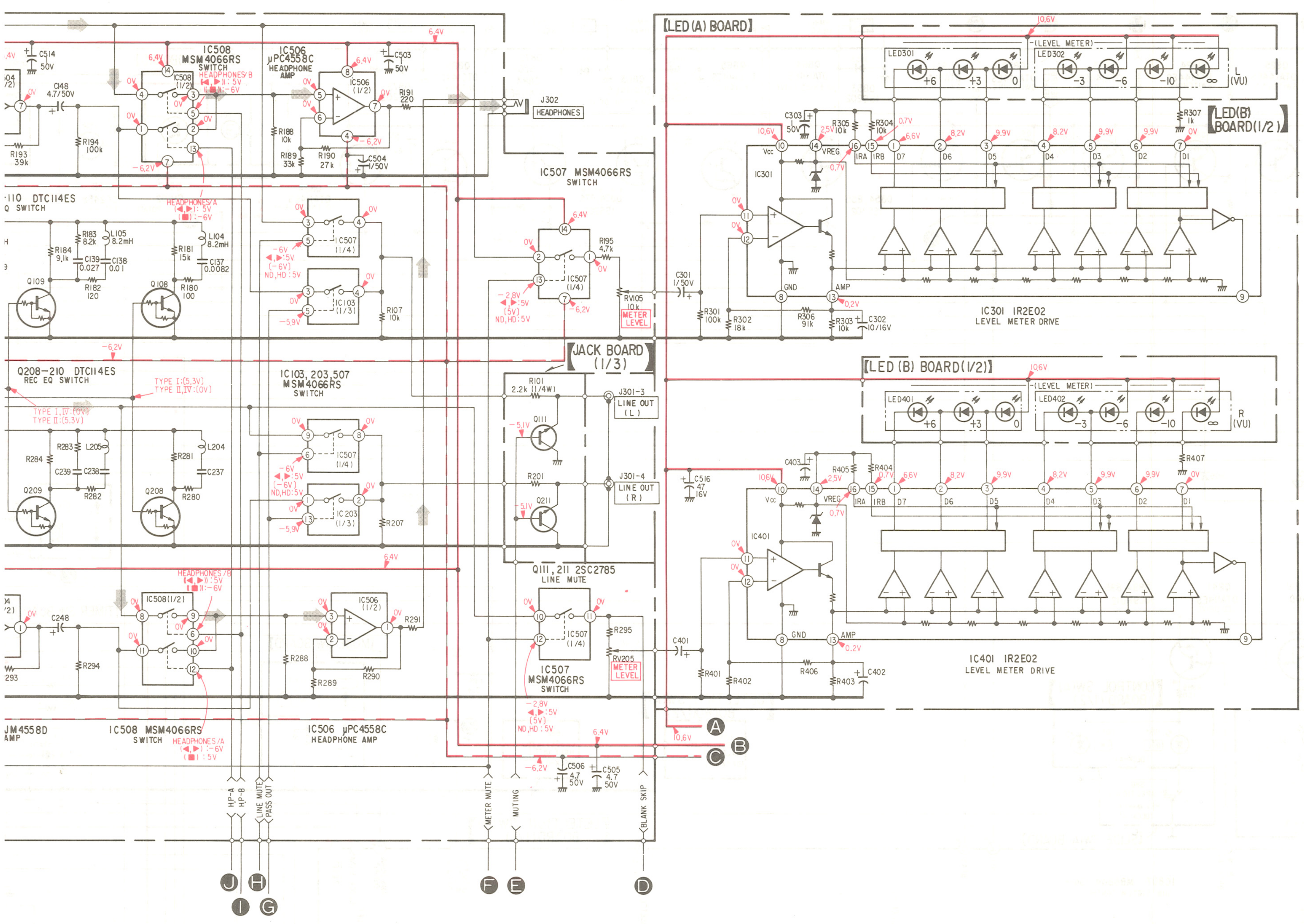

(1/2)
RD(1/3)
DECK IN
DECK IN
ECK AMS
ECK AMS
O
P
Q
R
S

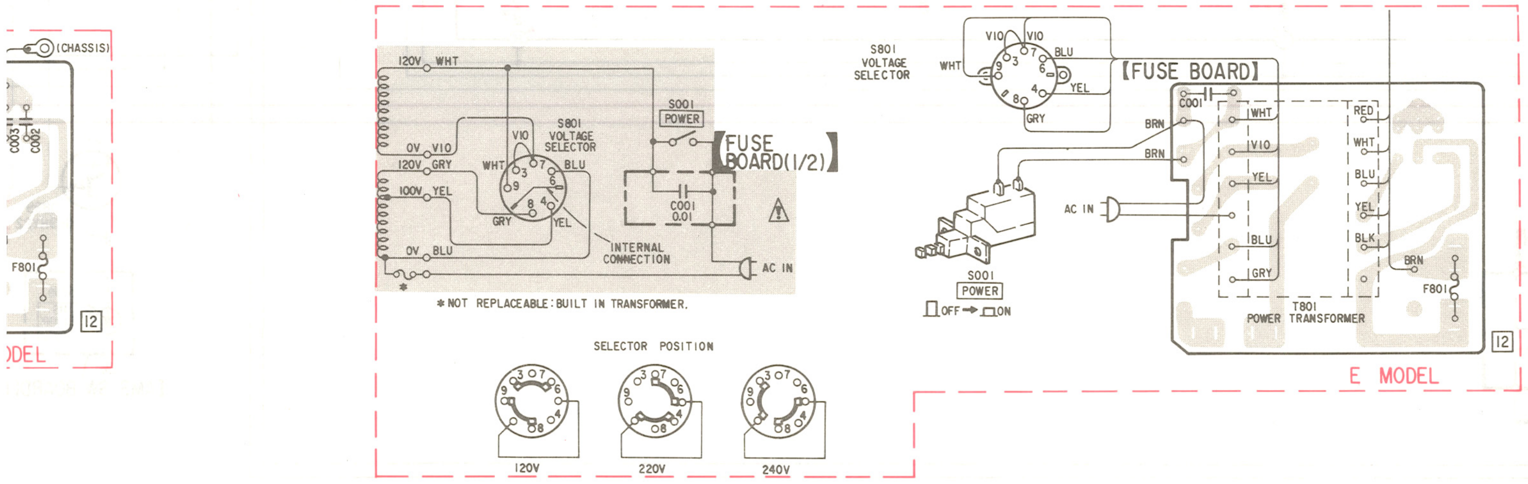
4-6. SCHEMATIC/MOUNTING DIAGRAM

— Power Supply Section —


240V
220V
0V
S001 POWER
FUSE BOARD(1/2)
C001 0.01
AC IN
*NOT REPLACEABLE: BUILT IN TRANSFORMER.
FUSE BOARD
(CHASSIS)
BRN
BRN
RED
WHT
BLU
YEL
BLK
S001 POWER
OFF ON
AC IN
T801 POWER TRANSFORMER
F801
12
AEP MODEL

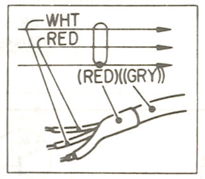

120V WHT
0V V10
120V GRY
100V YEL
0V BLU
S801 VOLTAGE SELECTOR
S001 POWER
FUSE BOARD(1/2)
C001 0.01
INTERNAL CONNECTION
AC IN
*NOT REPLACEABLE: BUILT IN TRANSFORMER.
SELECTOR POSITION
120V
220V
240V
S801 VOLTAGE SELECTOR
FUSE BOARD
S001 POWER
OFF ON
AC IN
T801 POWER TRANSFORMER
F801
12
E MODEL


[LED (A) BOARD]
[LED (B) BOARD (1/2)]
[LED(B) BOARD(1/2)]
[JACK BOARD (1/3)]
LEVEL METER
LED301
LED302
LED401
LED402
IC301 IR2E02 LEVEL METER DRIVE
IC401 IR2E02 LEVEL METER DRIVE
IC508 MSM4066RS SWITCH
IC506 μPC4558C HEADPHONE AMP
IC507 MSM4066RS SWITCH
IC103, 203, 507 MSM4066RS SWITCH
Q110 DTC114ES REC EQ SWITCH
Q208–210 DTC114ES REC EQ SWITCH
Q111, 211 2SC2785 LINE MUTE
J302 HEADPHONES
J301-3 LINE OUT (L)
J301-4 LINE OUT (R)
RV105 METER LEVEL
RV205 METER LEVEL
JM4558D AMP
IC508 MSM4066RS SWITCH
IC506 μPC4558C HEADPHONE AMP
HP-A
HP-B
LINE MUTE
PASS OUT
METER MUTE
MUTING
BLANK SKIP
A
B
C
D
E
F
G
H
I
J


(CHASSIS)
F801
120V
WHT
0V
V10
GRY
100V
YEL
BLU
S801 VOLTAGE SELECTOR
S001 POWER
[FUSE BOARD(1/2)]
C001 0.01
INTERNAL CONNECTION
AC IN
* NOT REPLACEABLE: BUILT IN TRANSFORMER.
SELECTOR POSITION
120V
220V
240V
S801 VOLTAGE SELECTOR
[FUSE BOARD]
S001 POWER
OFF ON
T801 POWER TRANSFORMER
E MODEL
12
MODEL

Note on Mounting Diagram

- Color code of sleeving over the end of the jacket.


WHT
RED
(RED)((GRY))

- ○—— : parts extracted from the component side.
- ●—— : parts extracted from the conductor side.
- ■ : part mounted on the conductor side.
- ━➔━ : signal path
- ━━➔ : L-CH signal path
- ━▪▪➔ : R-CH signal path
- ▨ : B + pattern
- ▨ : B – pattern

Note on Schematic Diagram

- All capacitors are in μF unless otherwise noted. pF: μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and $^1/_4$W or less unless otherwise specified.
- Components for right channel have same values as for left channel. Reference numbers are coded from 200.
- ⇨ : signal path.
- ⊣w∿⊢ : fusible resistor.
- △ : internal component.
- ━━ : B+ bus.
- ━ ━ ━ : B– bus.
- ☐ : adjustment for repair.

- AC voltage readings in the bias oscillator with a VTVM.
- Voltages are dc with respect to ground unless otherwise noted.
- Readings are taken under no-signal conditions with a VOM (50 kΩ/V).

( ) : DECK-A
(( )) : DECK-B
▶ : FWD
◀ : REV
▶▶ : FF
◀◀ : REW
■ : STOP
● : REC
[ ] : REC
ND : NORMAL SPEED DUBBING
HD : HIGH SPEED DUBBING

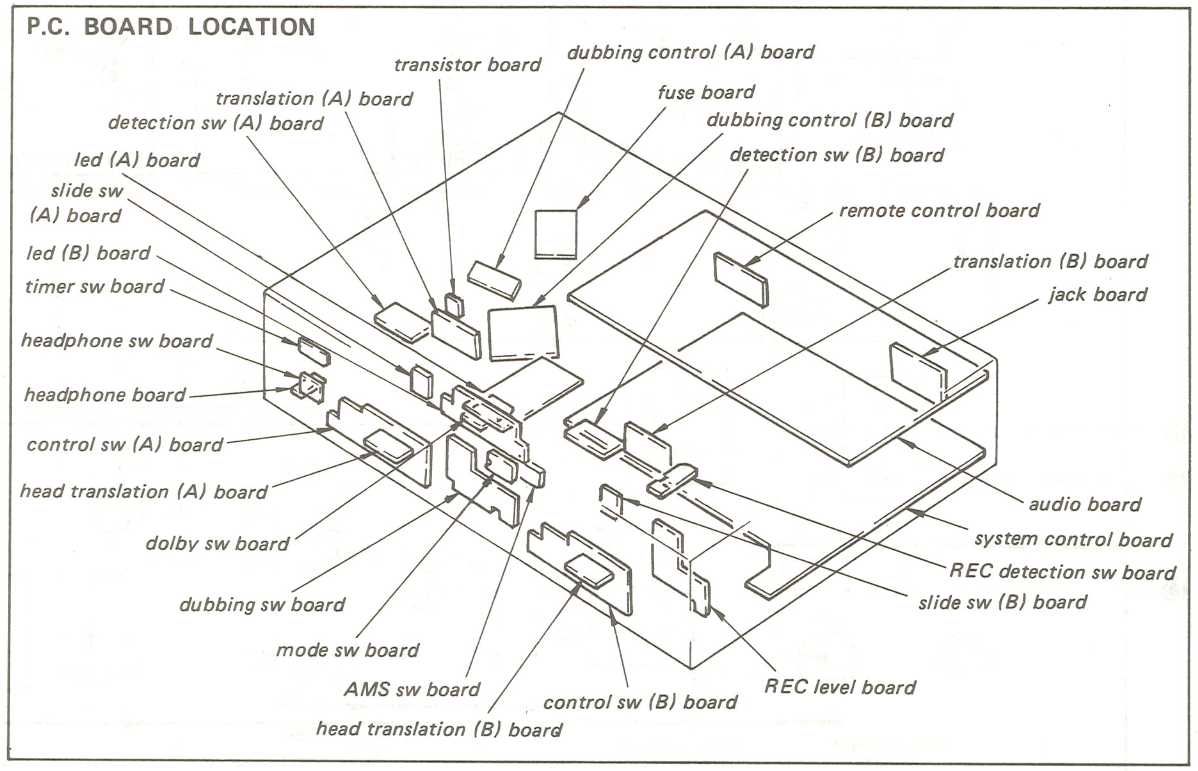
- Voltage variations may be noted due to normal production tolerances.
- Switch

Ref. No.	Switch	Position
S301	DOLBY NR ON/OFF	OFF
S302	DOLBY NR-B/C	B
S865, 885	TAPE SELECT/120 μ	OFF
S884	ERASURE PREVENTION	OFF
S886	TAPE SELECT (METAL)	OFF

Note: Voltages are measured with a VOM (50kΩ/V).

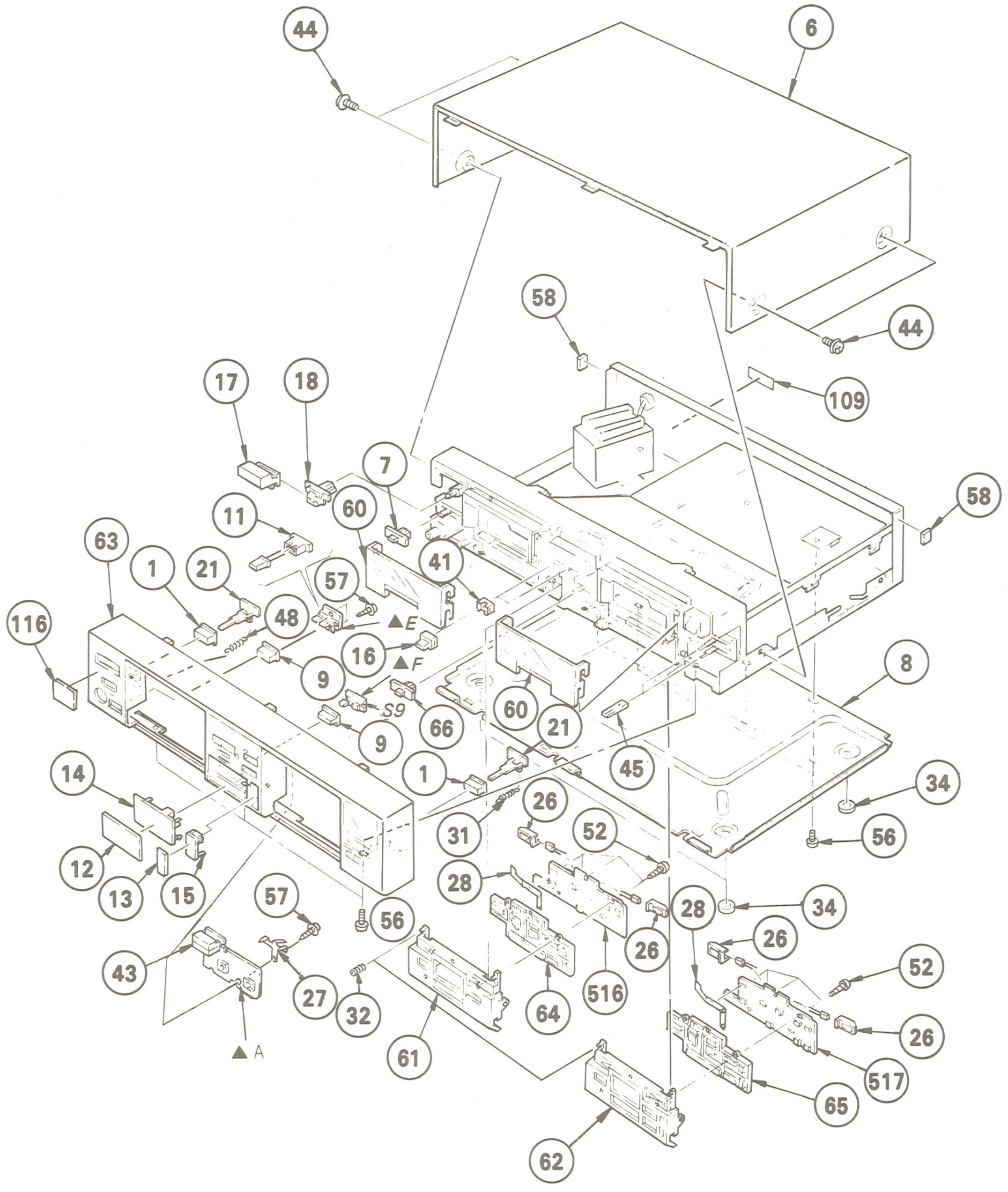
Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

P.C. BOARD LOCATION

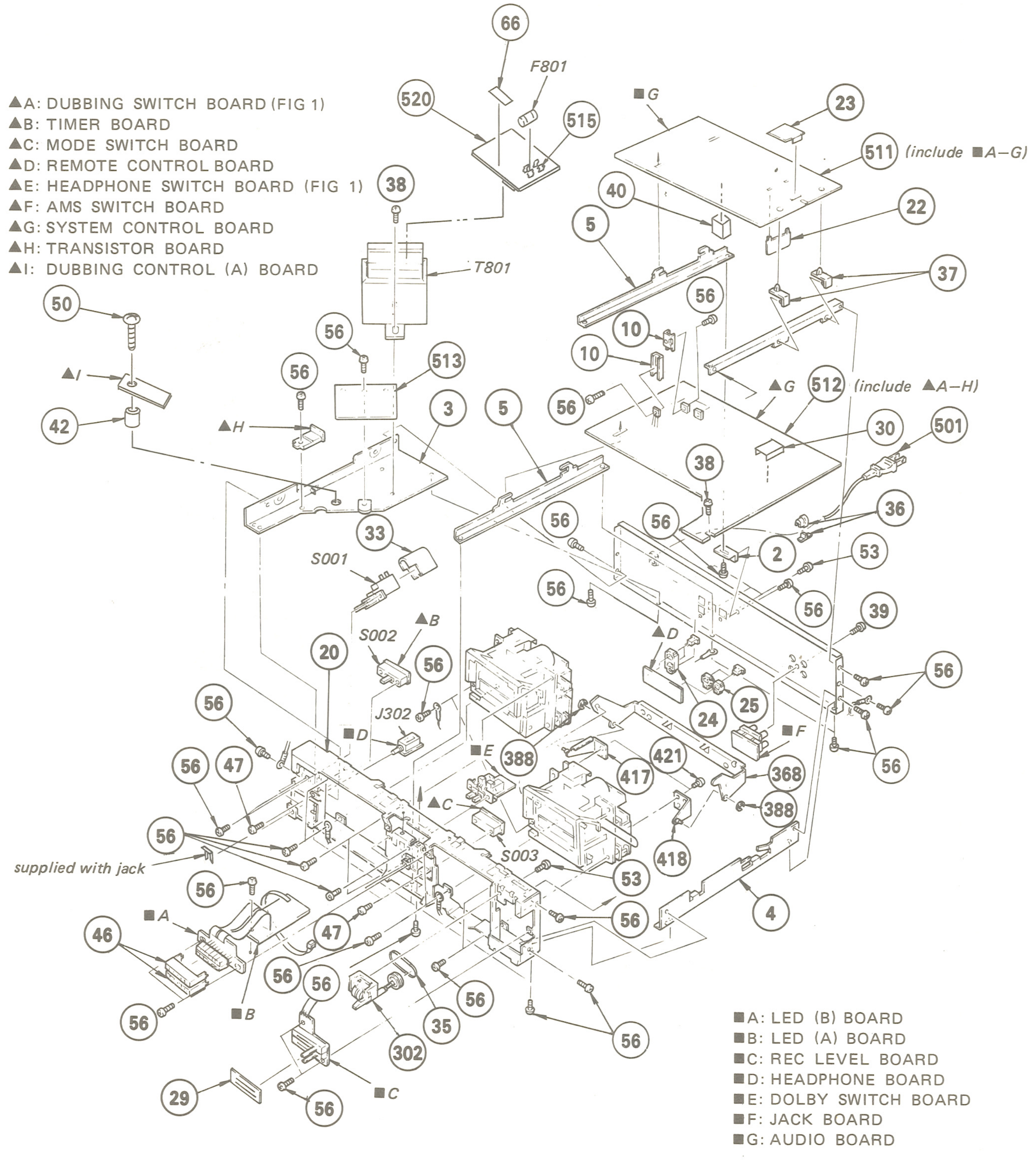

transistor board
dubbing control (A) board
translation (A) board
fuse board
detection sw (A) board
dubbing control (B) board
detection sw (B) board
led (A) board
slide sw (A) board
remote control board
led (B) board
translation (B) board
timer sw board
jack board
headphone sw board
headphone board
control sw (A) board
head translation (A) board
audio board
dolby sw board
system control board
REC detection sw board
slide sw (B) board
dubbing sw board
mode sw board
REC level board
AMS sw board
control sw (B) board
head translation (B) board

SECTION 5
EXPLODED VIEWS AND PARTS LIST

(1)


1
2
3
4
5
6
7
A
B
C
D
E
F
G
H
I
J
44
6
58
44
109
17
18
7
58
11
60
63
1
21
57
41
116
48
▲E
16
▲F
9
S9
66
60
21
8
9
45
34
14
1
26
31
52
56
12
13
15
28
57
56
28
34
26
26
43
27
32
64
516
52
61
▲A
26
517
65
62

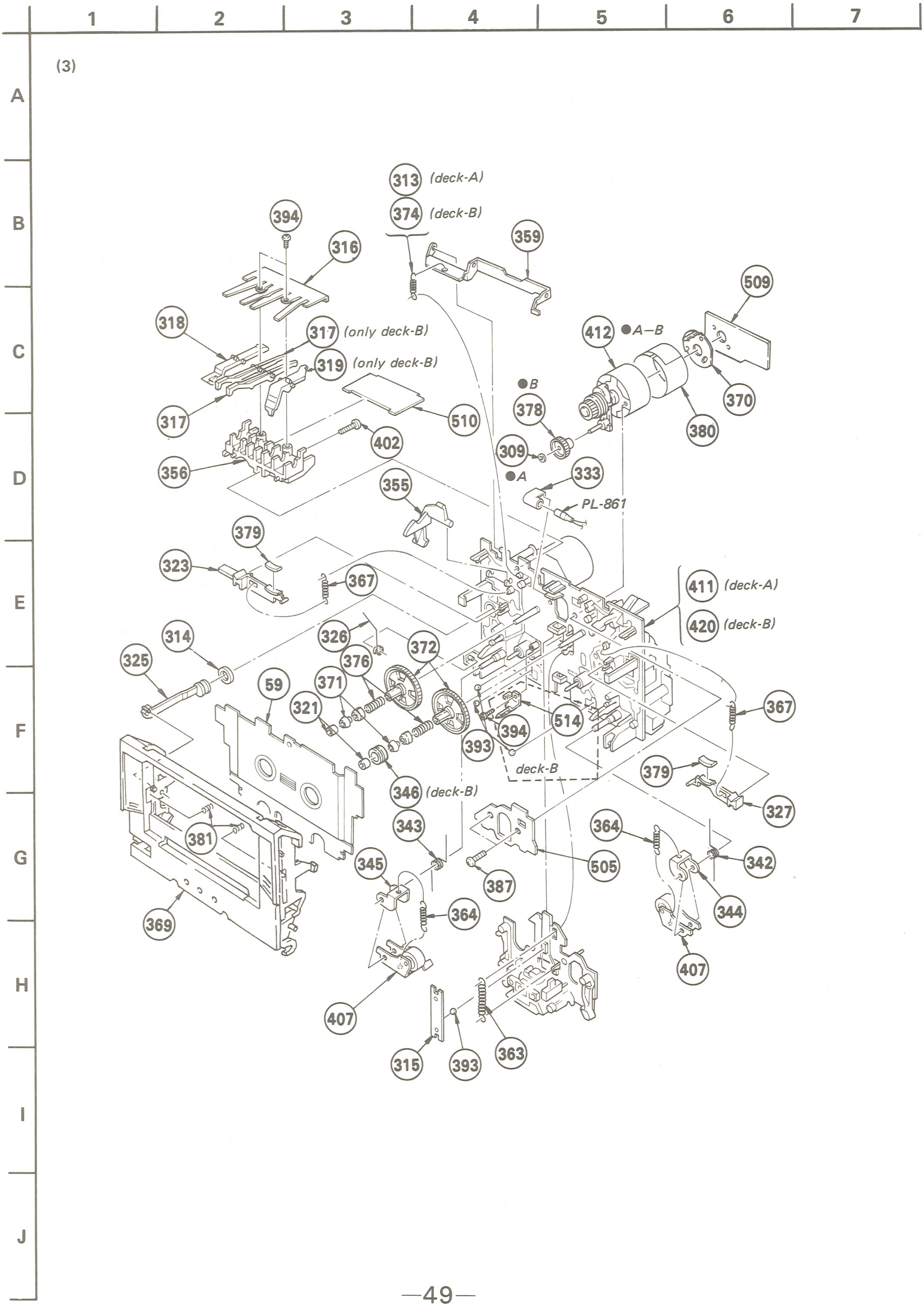
(2)

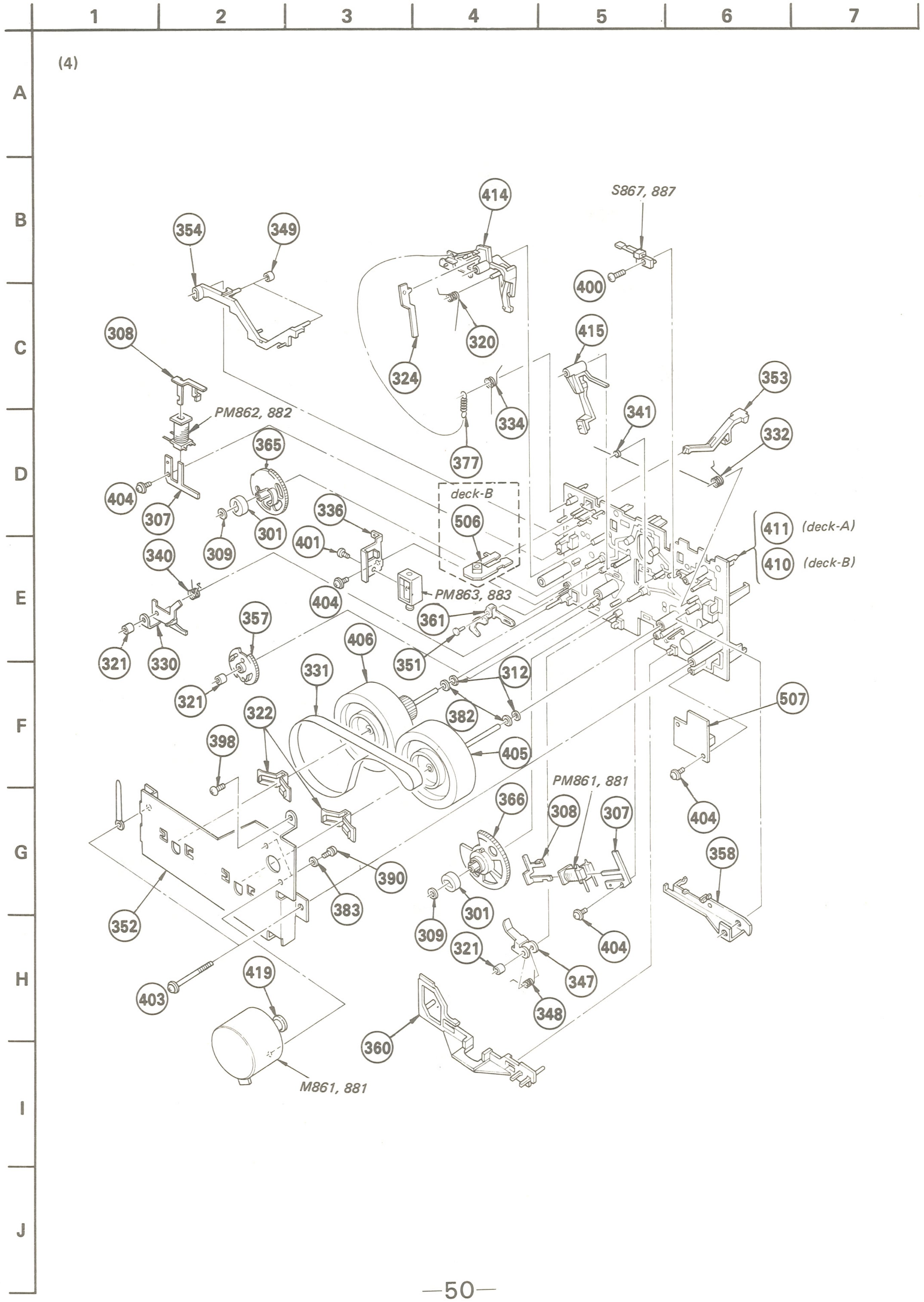

1
2
3
4
5
6
7
A
B
C
D
E
F
G
H
I
J
66
F801
520
515
■G
23
511 (include ■A–G)
38
40
22
5
T801
37
50
56
513
56
10
10
56
▲I
56
▲H
42
3
5
56
▲G
512 (include ▲A–H)
30
501
38
36
33
56
56
2
53
S001
56
56
39
▲B
▲D
S002
56
20
56
24
25
J302
56
■F
■D
56
47
■E
388
417
421
368
388
▲C
56
S003
418
supplied with jack
53
56
4
■A
46
47
56
56
56
■B
35
302
56
29
56
■C

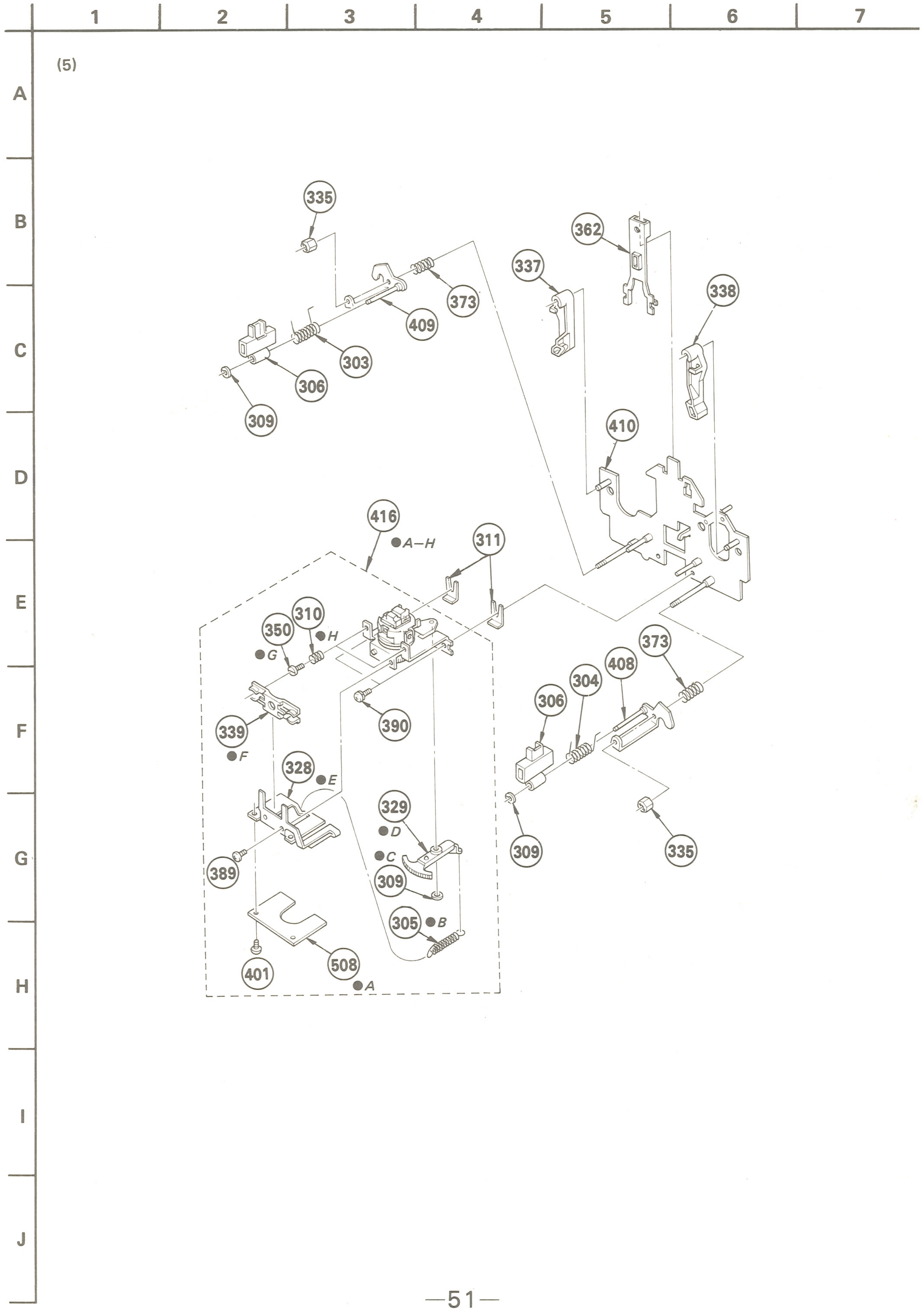
▲A: DUBBING SWITCH BOARD (FIG 1)
▲B: TIMER BOARD
▲C: MODE SWITCH BOARD
▲D: REMOTE CONTROL BOARD
▲E: HEADPHONE SWITCH BOARD (FIG 1)
▲F: AMS SWITCH BOARD
▲G: SYSTEM CONTROL BOARD
▲H: TRANSISTOR BOARD
▲I: DUBBING CONTROL (A) BOARD

■A: LED (B) BOARD
■B: LED (A) BOARD
■C: REC LEVEL BOARD
■D: HEADPHONE BOARD
■E: DOLBY SWITCH BOARD
■F: JACK BOARD
■G: AUDIO BOARD

(3)


A
B
C
D
E
F
G
H
I
J
313 (deck-A)
374 (deck-B)
317 (only deck-B)
319 (only deck-B)
412 ●A—B
●B
●A
PL-861
411 (deck-A)
420 (deck-B)
deck-B
346 (deck-B)


A
B
C
D
E
F
G
H
I
J
(4)
S867, 887
PM862, 882
deck-B
411 (deck-A)
410 (deck-B)
PM863, 883
PM861, 881
M861, 881


A
B
C
D
E
F
G
H
I
J
(5)
●A–H
●H
●G
●F
●E
●D
●C
●B
●A

GENERAL SECTION

No.	Part No.	Description
1	3-304-419-31	BUTTON, EJECT
2	*3-307-495-00	BRACKET (LEFT), MECHANICAL
3	*3-307-525-21	PLATE, SIDE, LEFT
4	*3-307-526-00	PLATE, SIDE, RIGHT
5	*3-307-527-00	PLATE, RELAY
6	3-307-532-11	CASE
7	3-307-538-21	KNOB, SWITCH, TIMER
8	*3-307-540-00	PLATE, BOTTOM
9	3-311-506-21	BUTTON, COUNTER
10	*3-312-615-31	HEAT SINK
11	3-315-146-00	(AEP,E)...HOLDER, LED
12	3-318-805-31	KNOB (STOP), T MOLD
13	3-318-806-51	KNOB (PAUSE), T MOLD
14	3-318-814-01	MOLD, KNOB, FWD
15	3-318-816-01	MOLD, KNOB, PAUSE
16	3-318-909-11	KNOB, PUSH
17	3-318-911-11	KNOB (POWER.L), T MOLD
18	3-318-915-01	JOINT (P), KNOB
19	*3-322-811-12	(US).....PLATE, JACK
19	*3-322-811-22	(AEP)....PLATE, JACK
19	*3-322-811-32	(E)......PLATE, JACK
20	*3-322-814-01	CHASSIS, AMPLIFIER
21	*3-322-815-01	SLIDER, EJECT
22	*3-322-816-01	PLATE (1), SHIELD
23	*3-322-817-01	PLATE (2), SHIELD
24	*3-322-818-01	HOLDER, CONNECTOR
25	*3-322-819-01	HOLDER, CONNECTOR
26	3-322-820-01	CASE, LED, DR
27	*3-322-822-01	SPRING (A), LEAF
28	*3-322-823-01	SPRING (B), LEAF
29	3-322-824-01	PLATE, ORNAMENTAL, REC CONTROL
30	*3-322-828-01	COVER, MICRO COMPUTER
31	3-540-244-00	SPRING, TENSION
32	3-565-224-00	SPRING, COMPRESSION
33	3-575-524-00	COVER, POWER SWITCH
34	3-576-731-11	FELT (H)
35	3-672-602-00	BELT (A), COUNTER
36	3-701-682-00	(US,E)....STOPPER, CORD
36	3-703-244-00	(AEP).....BUSHING, CORD
37	*3-701-832-00	HINGE, CIRCUIT BOARD
38	3-703-249-01	SCREW, S TIGHT, +PTTWH 3X6
39	3-703-473-00	SCREW, TERMINAL
40	*3-323-473-01	CASE, SHIELD
41	4-864-307-00	RING
42	*3-565-796-00	SPACER, PC BOARD
43	4-886-864-00	SPACER, LED
44	4-889-321-11	SCREW
45	4-902-815-21	KNOB, EQUALIZER
46	4-906-205-01	HOLDER (A), LED
47	7-621-775-10	SCREW +B 2.6X4
48	3-650-542-00	SPRING, TENSION
49	7-682-646-01	SCREW +PS 3X5
50	7-685-876-01	SCREW +BVTT 3X16 (S)
51	....	
52	7-685-134-19	SCREW +BTP 2.6X8 TYPE2 N-S
53	7-685-533-19	SCREW +BTP 2.6X6 TYPE2 N-S
54	7-685-751-09	SCREW +BVTT 3X6 (S)
55	....	
56	7-685-871-01	SCREW +BVTT 3X6 (S)
57	7-687-204-11	TOTSU PTPWH 2X6 NON-SLIT, TYPE2
58	9-911-840-XX	RUBBER (B)
59	X-3318-819-1	RETAINER ASSY, CASSETTE
60	X-3322-801-1	WINDOW ASSY, CASSETTE
61	X-3322-802-1	PANEL (A) ASSY, CONTROL
62	X-3322-803-1	PANEL (B) ASSY, CONTROL
63	X-3322-813-1	(US)......PANEL ASSY, FRONT
63	X-3322-814-1	(AEP,E)...PANEL ASSY, FRONT
64	X-3322-806-1	BUTTON (A) ASSY, CONTROL
65	X-3322-807-1	BUTTON (B) ASSY, CONTROL
66	3-701-946-21	(US)...LABEL, FUSE

NOTE:

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- If there are two or more same circuitsin a set such as a stereophonic machine, only typical circuit parts may be indicated and capacitors and resistors in other same circuits may be omitted.

CAPACITORS:
MF:μF, PF:μμF.

RESISTORS
· All resistors are in ohms.
· F : nonflammable

COILS
· MMH : mH, UH : μH

SEMICONDUCTORS
In each case, U : μ, for example:
UA...: μA..., UPA...: μPA..., UPC...: μPC,
UPD...: μPD...

ACCESSORY & PACKING MATERIAL

No.	Part No.	Description
101	1-551-734-11	CORD, CONNECTION (RK-74A)
102	1-556-372-41	CORD, CONNECTION (4 CORE)
103	3-312-976-00	SHEET, PROTECTION, PANEL
104	3-315-149-00	CUSHION (LEFT), LOWER
105	3-315-150-00	CUSHION (RIGHT), LOWER
106	3-315-151-00	CUSHION (LEFT), UPPER
107	3-315-152-00	CUSHION (RIGHT), UPPER
108	3-322-821-11	INDIVIDUAL CARTON
109	*3-322-830-01	(US,Canadian)...LABEL, MODEL NUMBER
109	*3-322-832-01	(AEP)....LABEL, MODEL NUMBER
109	*3-322-833-01	(E)......LABEL, MODEL NUMBER
110	3-701-630-00	BAG, POLYETHYLENE
111	3-703-680-00	LABEL, CAUTION, SUB, NEW UL
112	3-773-926-11	(E).....MANUAL, INSTRUCTION
112	3-773-926-21	(US)....MANUAL, INSTRUCTION
112	3-773-926-41	(AEP)...MANUAL, INSTRUCTION
113	*4-302-759-00	LABEL, SERIAL NUMBER
114	4-876-352-00	SHEET, PROTECTION

MECHANISM SECTION

No.	Part No.	Description
301	1-452-202-00	MAGNET
302	1-548-563-81	COUNTER, TAPE
303	3-306-249-00	SPRING (LEFT)
304	3-306-250-00	SPRING (RIGHT)
305	3-306-258-01	SPRING, TENSION
306	3-306-269-01	GUIDE, TAPE
307	3-307-332-00	ARBOR, FIXED
308	3-307-333-00	ARBOR, TRIGGER
309	3-307-394-00	RETAINER (B), THRUST
310	3-307-460-00	SPRING, COMPRESSION
311	3-307-477-01	SEAM (A), HEAD ADJUSTMENT
311	3-307-477-11	SEAM (A), HEAD ADJUSTMENT
311	3-307-477-21	SEAM (A), HEAD ADJUSTMENT
311	3-307-477-31	SEAM (A), HEAD ADJUSTMENT
311	3-307-477-41	SEAM (A), HEAD ADJUSTMENT
312	3-307-482-00	WASHER, LUMILER
313	3-312-432-00	SPRING, TENSION
314	3-312-441-00	RING, PISTON
315	3-319-601-01	SPRING
316	3-319-602-01	SPRING
317	3-319-603-01	LEVER, REC DETECTION
318	3-319-604-01	LEVER, HALF DETECTION
319	3-319-605-01	LEVER, METAL DETECTION
320	3-319-606-01	SPRING
321	3-319-607-01	BUSHING, REEL TABLE
322	3-319-608-01	RETAINER, THRUST
323	*3-319-611-01	LEVER (LEFT), BACK TENSION
324	3-319-612-01	SPRING
325	3-319-613-01	PISTON (B)
326	3-319-614-01	SPRING
327	*3-319-615-01	LEVER (RIGHT), BACK TENSION
328	3-319-620-01	PLATE, ORNAMENTAL, HEAD
329	3-319-625-01	GEAR, ROTARY HEAD
330	*3-319-628-01	LEVER, REVERSE TRIGGER
331	3-319-630-11	BELT (R), CAPSTAN
332	3-319-633-01	SPRING
333	3-319-636-01	RUBBER, LAMP HOLDER
334	3-319-637-01	SPRING (R)
335	3-319-638-01	NUT, ADJUSTMENT
336	*3-319-639-01	BRACKET, TRIGGER PM
337	3-319-642-01	LEVER (R), P ROLLER SELECTION
338	3-319-643-01	LEVER (L), P ROLLER SELECTION
339	3-319-644-01	STOPPER
340	3-319-648-01	SPRING
341	3-319-649-01	SPRING
342	3-319-650-01	SPRING (R)

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MF:μF, PF:μμF.

RESISTORS
- All resistors are in ohms.
- F : nonflammable

COILS
- MMH : mH, UH : μH

SEMICONDUCTORS
In each case, U : μ, for example:
UA...: μA..., UPA...: μPA..., UPC...: μPC,
UPD...: μPD...

MECHANISM SECTION

No.	Part No.	Description
343	3-319-651-01	SPRING (L)
344	*3-319-652-01	PLATE (RIGHT), LIMITER
345	*3-319-653-01	PLATE (LEFT), LIMITER
346	....	
347	*3-319-658-01	LEVER, TRIGGER KICK
348	3-319-660-01	SPRING
349	3-319-662-01	RUBBER, BRAKE
350	3-319-663-01	SCREW, ADJUSTMENT, AZIMUTH
351	*3-319-664-01	SHAFT, CONTROL LEVER
352	*3-319-665-01	RETAINER, THRUST
353	3-319-666-01	LEVER (RIGHT), REC DETECTION
354	*3-319-668-01	PLATE, BRAKE
355	3-319-669-01	LEVER, EJECT
356	3-319-670-01	HOLDER, SWITCH, DETECTION
357	3-319-674-01	GEAR, REVERSE CAM
358	*3-319-676-01	LEVER, FWD
359	*3-319-678-01	LEVER, SWITCH LIFT
360	*3-319-681-01	SLIDER, REVERSE
361	*3-319-683-01	LEVER, CONTROL, TRIGGER
362	3-319-684-01	PROTECTOR, EDGE
363	3-319-685-01	SPRING, TENSION
364	3-319-686-01	SPRING, TENSION
365	3-319-688-01	GEAR, PAUSE CAM
366	3-319-689-01	GEAR, FWD CAM
367	3-319-694-01	SPRING, TENSION
368	*3-319-698-01	LEVER, CHANGE
369	3-319-700-01	HOLDER, CASSETTE
370	*3-319-702-01	PLATE, SHIELD, REEL MOTOR
371	3-319-704-61	CAP, REEL
372	3-319-705-01	REEL TABLE
373	3-537-215-00	SPRING, COMPRESSION
374	3-541-231-00	SPRING, TENSION
375	3-558-339-00	CLAW (R), REEL TABLE
376	....	
377	....	
378	3-575-332-00	GEAR, FR
379	3-575-346-01	FELT, BREKE
380	3-575-457-00	PLATE (B), SHIELD, MOTOR
381	3-610-808-00	SPRING (1)
382	3-701-438-11	WASHER, 2.5
383	....	
384	7-621-710-26	SET-SCREW, SLOT 2X3 FLAT POINT
386	7-621-775-00	SCREW +B 2.6X3
387	7-621-775-60	SCREW +B 2.6X12
388	7-624-105-04	STOP RING 2.3, TYPE-E
389	7-627-553-17	SCREW, PRECISION +P 2X2
390	7-628-253-05	SCREW +PS 2X4

MECHANISM SECTION

No.	Part No.	Description
391	7-671-111-11	STEEL, BOUL 1.5MM
392	7-671-112-01	STEEL, BALL
393	7-671-112-11	BALL, STEEL
394	7-685-102-19	SCREW +P 2X4 TYPE2 SLIT
395	7-685-131-21	SCREW +P 2.6X4 TYPE2 SLIT
396	7-685-132-21	SCREW +P 2.6X5 TYPE2 SLIT
397	7-685-645-11	SCREW +BVTP 3X6 TYPE2 N-S
398	....	
399	7-685-790-04	SCREW +BVTT 2.6X4 (S)
400	....	
401	7-685-850-01	SCREW +BVTT 2X3 (S)
402	7-685-865-01	SCREW +BVTT 2.6X12 (S)
403	7-685-879-01	SCREW +BVTT 3X30 (S)
404	7-687-204-21	TOTSU PTPWH 2X6 NON-SLIT, TYPE2
405	X-3319-623-1	FLYWHEEL ASSY
406	X-3319-606-1	FLYWHEEL (T) ASSY
407	X-3319-607-1	PINCH LEVER ASSY
408	*X-3319-608-1	LEVER (RIGHT) ASSY, GUIDE
409	*X-3319-609-1	LEVER (LEFT) ASSY, GUIDE
410	*X-3319-610-1	CHASSIS ASSY, REVERSE HEAD
411	X-3319-611-1	CHASSIS ASSY, MECHANICAL
412	X-3319-612-1	MOTOR ASSY, REEL
413	X-3319-613-1	BRACKET COMPLETE ASSY, HEAD
414	*X-3319-614-1	LEVER ASSY, PAUSE
415	*X-3319-615-1	LEVER ASSY, FWD LOCK
416	A-2108-100-A	HEAD UNIT ASSY (A DECK)
416	A-2108-102-A	HEAD UNIT ASSY (B DECK)
417	*X-3319-618-2	PLATE (B) ASSY, FULCRUM, LEVER
418	*X-3319-619-2	PLATE (A) ASSY, FULCRUM, LEVER
419	....	
420	*X-3319-622-1	CHASSIS ASSY, MECHANICAL

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- All resistors are in ohms.
- F : nonflammable

COILS
- MMH : mH, UH : μH

SEMICONDUCTORS
In each case, U : μ, for example:
UA...: μA..., UPA...: μPA..., UPC...: μPC,
UPD...: μPD...

Parts used in this set differ depending on Serial No. shown below.

FORMER	US model AEP model	Up to Serial No. 802,000 Up to Serial No. 500,200
NEW	US model AEP model E model	Serial No. 802,001 and later Serial No. 500,201 and later Applicable for all sets

ELECTRICAL PARTS

Ref.No.	Part No.	Description			
501	.1-551-628-00	CORD, POWER			
502	*1-560-039-00	PIN, CONNECTOR			
503	*1-560-242-31	BUS BAR 5P			
504	*1-560-280-00	CONNECTOR PIN 3P			
505	*1-612-725-11	PC BOARD, PH.T			
506	*1-612-727-11	PC BOARD, REC DETECT			
507	*1-612-728-11	PC BOARD, SLIDE SW			
508	*1-612-729-11	PC BOARD, HEAD TRANSLATION			
509	*1-613-522-11	PC BOARD, TRANSLATION			
510	*1-613-523-11	PC BOARD, DETECTION SW			
511	*A-2056-243-A	PC BOARD ASSY, AUDIO			
512	*A-2056-244-A	(US)......PC BOARD ASSY, SYSTEM CONTROL			
512	A-2056-256-A	(AEP,E)...PC BOARD ASSY, SYSTEM CONTROL			
513	*1-613-887-11	(FORMER)...PC BOARD. DUBBING CONTROL			
514	1-806-969-11	PHOTO SENSOR			
515	1-533-162-00	HOLDER, FUSE			
516	*1-613-589-11	PC BOARD, CONTROL SW (A)			
517	*1-613-590-11	PC BOARD, CONTROL SW (B)			
518	*1-535-139-00	BASE POST 22MM (10MM PITCH) 2P			
519	*1-614-396-11	PC BOARD, SLIDE SW			
520	*1-614-697-11	PC BOARD, FUSE			
C001 ⚠	.1-161-744-00	CAP, CERAMIC 10000PF FZ			
C002	1-162-110-00	(US, AEP)CERAMIC 0.001MF		10%	50V
C003	1-162-110-00	(US, AEP)CERAMIC 0.001MF		10%	50V
C004	1-162-110-00	(US, AEP)CERAMIC 0.001MF		10%	50V
C101	1-123-352-00	ELECT	1MF	20%	50V
C102	1-123-316-00	ELECT	10MF	20%	16V
C103	1-162-288-31	CERAMIC	330PF	10%	50V
C104	1-136-157-00	FILM	0.022MF	5%	50V
C105	1-123-355-00	ELECT	4.7MF	20%	50V
C106	1-136-158-00	FILM	0.027MF	5%	50V
C107	1-136-158-00	FILM	0.027MF	5%	50V
C108	1-162-289-31	CERAMIC	390PF	10%	50V
C109	1-136-157-00	FILM	0.022MF	5%	50V
C110	1-123-355-00	ELECT	4.7MF	20%	50V
C111	1-136-158-00	FILM	0.027MF	5%	50V
C112	1-123-380-00	ELECT	1MF	20%	50V
C113	1-123-380-00	ELECT	1MF	20%	50V
C114	1-123-369-00	ELECT	4.7MF	20%	50V
C115	1-136-153-00	FILM	0.01MF	5%	50V
C116	1-136-155-00	FILM	0.015MF	5%	50V
C117	1-136-153-00	FILM	0.01MF	5%	50V
C118	1-136-163-00	FILM	0.068MF	5%	50V
C119	1-136-168-00	FILM	0.18MF	5%	50V
C120	1-136-158-00	FILM	0.027MF	5%	50V
C121	1-123-352-00	ELECT	1MF	20%	50V
C122	1-136-168-00	FILM	0.18MF	5%	50V
C123	1-136-170-00	FILM	0.27MF	5%	50V
C124	1-136-166-00	FILM	0.12MF	5%	50V
C125	1-136-163-00	FILM	0.068MF	5%	50V
C126	1-123-369-00	ELECT	4.7MF	20%	50V
C127	1-123-380-00	ELECT	1MF	20%	50V
C128	1-123-307-00	ELECT	100MF	20%	10V
C129	1-123-369-00	ELECT	4.7MF	20%	50V
C130	1-136-157-00	FILM	0.022MF	5%	50V
C131	1-110-205-00	MYLAR	0.0068MF	5%	50V
C132	1-110-206-00	MYLAR	0.0082MF	5%	50V
C133	1-136-154-00	FILM	0.012MF	5%	50V
C134	1-110-205-00	MYLAR	0.0068MF	5%	50V
C136	1-136-161-00	FILM	0.047MF	5%	50V
C137	1-110-206-00	MYLAR	0.0082MF	5%	50V
C138	1-136-153-00	FILM	0.01MF	5%	50V
C139	1-136-158-00	FILM	0.027MF	5%	50V
C140	1-110-202-00	MYLAR	0.0039MF	5%	50V
C141	1-110-197-00	MYLAR	0.0015MF	5%	50V
C145	1-107-169-00	MICA	100PF	5%	500V
C146	1-107-163-00	MICA	47PF	5%	500V
C147	1-162-293-00	CERAMIC	820PF	10%	50V
C148	1-123-369-00	ELECT	4.7MF	20%	50V
C149	1-136-166-00	FILM	0.12MF	5%	50V
C150	1-162-302-31	CERAMIC	0.0022MF	20%	16V
C151	1-162-294-31	CERAMIC	0.001MF	10%	50V
C152	1-162-290-31	CERAMIC	470PF	10%	50V
C301	1-123-611-00	ELECT	1MF	20%	50V
C302	1-123-612-00	ELECT	2.2MF	20%	50V
C303	1-123-611-00	ELECT	1MF	20%	50V
C401	1-123-611-00	ELECT	1MF	20%	50V
C402	1-123-612-00	ELECT	2.2MF	20%	50V
C403	1-123-611-00	ELECT	1MF	20%	50V
C501	1-123-380-00	ELECT	1MF	20%	50V
C502	1-123-380-00	ELECT	1MF	20%	50V
C503	1-123-380-00	ELECT	1MF	20%	50V
C504	1-123-380-00	ELECT	1MF	20%	50V
C505	1-123-369-00	ELECT	4.7MF	20%	50V
C506	1-123-369-00	ELECT	4.7MF	20%	50V
C507	1-129-714-00	FILM	0.01MF	5%	630V
C508	1-130-023-00	FILM	0.0027MF	5%	100V
C509	1-130-289-00	FILM	0.0047MF	5%	100V
C510	1-130-023-00	FILM	0.0027MF	5%	100V
C511	1-124-381-00	ELECT	2.2MF	20%	50V

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In each case, U : μ, for example:
UA...: μA..., UPA...: μPA..., UPC...: μPC,
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ELECTRICAL PARTS

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C512	1-123-379-00	ELECT	0.47MF	20%	50V
C513	1-123-380-00	ELECT	1MF	20%	50V
C514	1-123-380-00	ELECT	1MF	20%	50V
C515	1-123-380-00	ELECT	1MF	20%	50V
C516	1-123-821-00	ELECT	47MF	20%	16V
C801	1-123-337-00	ELECT	1000MF	20%	25V
C802	1-123-337-00	ELECT	1000MF	20%	25V
C803	1-123-336-00	ELECT	470MF	20%	25V
C804	1-123-325-00	ELECT	2200MF	20%	16V
C805	1-123-308-00	ELECT	220MF	20%	10V
C806	1-123-308-00	ELECT	220MF	20%	10V
C807	1-123-298-00	ELECT	470MF	20%	6.3V
C808	1-123-321-00	ELECT	220MF	20%	16V
C809	1-123-307-00	ELECT	100MF	20%	10V
C811	1-123-356-00	ELECT	10MF	20%	16V
C812	1-123-356-00	ELECT	10MF	20%	16V
C813	1-123-381-00	(FORMER)...ELECT 2.2MF		20%	50V
C813	1-123-380-00	(NEW)...ELECT 1MF		20%	50V
C814	1-123-381-00	(FORMER)...ELECT 2.2MF		20%	50V
C814	1-123-382-00	(NEW)...ELECT 3.3MF		20%	50V
C815	1-123-356-00	ELECT	10MF	20%	16V
C816	1-123-380-00	ELECT	1MF	20%	50V
C817	1-123-380-00	ELECT	1MF	20%	50V
C818	1-123-356-00	(FORMER)...ELECT 10MF		20%	16V
C819	1-123-356-00	(FORMER)...ELECT 10MF		20%	16V
C820	1-123-381-00	ELECT	2.2MF	20%	50V
C821	1-123-356-00	ELECT	10MF	20%	16V
C822	1-123-356-00	ELECT	10MF	20%	16V
C823	1-123-369-00	ELECT	4.7MF	20%	25V
C824	1-123-369-00	(FORMER)...ELECT 4.7MF		20%	25V
C825	1-123-356-00	(FORMER)...ELECT 10MF		20%	16V
C826	1-123-356-00	(FORMER)...ELECT 10MF		20%	16V
C827	1-123-356-00	ELECT	10MF	20%	16V
C831	1-162-108-00	CERAMIC	680PF	10%	50V
C832	1-162-111-00	CERAMIC	0.0022MF	30%	25V
C833	1-162-110-00	CERAMIC	0.001MF	10%	50V
C834	1-162-100-00	CERAMIC	150PF	10%	50V
C835	1-162-100-00	CERAMIC	150PF	10%	50V
C836	1-162-029-00	(FORMER) ...CERAMIC 47PF		5%	50V
C836	1-162-037-00	(NEW)...ELECT 100PF		5%	50V
C837	1-162-029-00	(FORMER)...CERAMIC 47PF		5%	50V
C837	1-162-037-00	(NEW)...ELECT 100PF		5%	50V
C838	1-162-113-00	CERAMIC	0.01MF	30%	16V
C839	1-162-113-00	CERAMIC	0.01MF	30%	16V
C840	1-102-852-00	CERAMIC	47PF	5%	50V
C841	1-123-356-00	(FORMER)...ELECT 10MF		20%	16V
C842	1-123-356-00	(FORMER)...ELECT 10MF		20%	16V
C843	1-123-380-00	ELECT	1MF	20%	50V
C844	1-123-298-00	(FORMER)...ELECT 47MF		20%	6.3V
C845	1-123-332-00	ELECT	47MF	20%	25V
C846	1-162-305-31	CERAMIC	0.0068MF	30%	16V
C847	1-162-305-31	CERAMIC	0.0068MF	30%	16V
C851	1-123-356-00	ELECT	10MF	20%	16V
C852	1-123-356-00	ELECT	10MF	20%	16V
C871	1-123-356-00	ELECT	10MF	20%	16V
C872	1-123-356-00	ELECT	10MF	20%	16V
CNP301	*1-564-506-11	PLUG, CONNECTOR 3P			
CNP302	*1-564-506-11	PLUG, CONNECTOR 3P			
CNP303	*1-564-336-00	PIN, CONNECTOR 2P			
CNP304	*1-564-509-11	PLUG, CONNECTOR 6P			
CNP305	*1-564-506-11	PLUG, CONNECTOR 3P			
CNP306	*1-564-505-11	PLUG, CONNECTOR 2P			
CNP801	*1-564-341-11	PIN, CONNECTOR 7P			
CNP802	*1-564-339-00	PIN, CONNECTOR 5P			
CNP803	*1-564-338-00	PIN, CONNECTOR 4P			
CNP804	*1-564-337-00	PIN, CONNECTOR 3P			
CNP805	*1-564-337-00	PIN, CONNECTOR 3P			
CNP806	*1-564-336-00	PIN, CONNECTOR 2P			
CNP809	*1-564-337-00	PIN, CONNECTOR 3P			
CNP810	*1-564-338-00	PIN, CONNECTOR 4P			
CNP811	*1-564-336-00	PIN, CONNECTOR 2P			
CNP812	*1-564-341-11	PIN, CONNECTOR 7P			
CNP813	*1-564-507-11	PLUG, CONNECTOR 4P			
CNP814	*1-564-505-31	PLUG, CONNECTOR 2P			
CNP815	*1-564-505-11	PLUG, CONNECTOR 2P			
CNP816	*1-564-505-21	PLUG, CONNECTOR 2P			
CNP817	*1-564-505-41	PLUG, CONNECTOR 2P			
CNP818	*1-564-506-11	PLUG, CONNECTOR 3P			
CNP819	*1-564-507-11	PLUG, CONNECTOR 4P			
CNP820	*1-564-505-31	PLUG, CONNECTOR 2P			
CNP821	*1-564-505-11	PLUG, CONNECTOR 2P			
CNP822	*1-564-505-21	PLUG, CONNECTOR 2P			
CNP823	*1-564-505-41	PLUG, CONNECTOR 2P			
CNP824	*1-564-342-11	PIN, CONNECTOR 8P			
CNP825	*1-564-336-00	PIN, CONNECTOR 2P			
CNP826	*1-564-336-00	PIN, CONNECTOR 2P			
CNP830	*1-564-509-11	PLUG, CONNECTOR 6P			
CNP831	*1-564-506-11	PLUG, CONNECTOR 3P			
CNP833	*1-564-509-11	PLUG, CONNECTOR 6P			
CNP834	*1-564-508-11	PLUG, CONNECTOR 5P			
CNP835	*1-564-506-11	PLUG, CONNECTOR 3P			
CT501	1-141-225-00	CAP, TUNING, TRIMAR			
D501	8-719-107-94	DIODE 1SS202-1			
D502	8-719-107-94	DIODE 1SS202-1			
D503	8-719-107-94	DIODE 1SS202-1			
D504	8-719-107-94	DIODE 1SS202-1			
D505	8-719-107-94	DIODE 1SS202-1			
D506	8-719-107-94	DIODE 1SS202-1			

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D507	8-719-107-94	DIODE 1SS202-1
D508	8-719-107-94	DIODE 1SS202-1
D509	8-719-107-94	DIODE 1SS202-1
D510	8-719-107-94	DIODE 1SS202-1
D511	8-719-107-94	DIODE 1SS202-1
D801	8-719-200-23	DIODE 11E2
D802	8-719-200-23	DIODE 11E2
D803	8-719-200-23	DIODE 11E2
D804	8-719-200-23	DIODE 11E2
D805	8-719-200-23	DIODE 11E2
D806	8-719-200-23	DIODE 11E2
D807	8-719-200-23	DIODE 11E2
D808	8-719-200-23	DIODE 11E2
D810	1-806-969-11	PHOTO SENSOR
D811	8-719-107-94	DIODE 1SS202-1
D812	8-719-107-94	DIODE 1SS202-1
D813	8-719-107-94	DIODE 1SS202-1
D814	8-719-107-94	DIODE 1SS202-1
D815	8-719-107-94	DIODE 1SS202-1
D816	8-719-107-94	DIODE 1SS202-1
D817	8-719-107-94	DIODE 1SS202-1
D819	8-719-107-94	(FORMER)...DIODE 1SS202-1
D820	8-719-107-94	(FORMER)...DIODE 1SS202-1
D821	8-719-107-94	DIODE 1SS202-1
D822	8-719-107-94	(FORMER)...DIODE 1SS202-1
D823	8-719-107-94	(FORMER)...DIODE 1SS202-1
D824	8-719-107-94	(FORMER)...DIODE 1SS202-1
D825	8-719-107-94	DIODE 1SS202-1
D826	8-719-107-94	(FORMER)...DIODE 1SS202-1
D827	8-719-107-94	(FORMER)...DIODE 1SS202-1
D828	8-719-107-94	(FORMER)...DIODE 1SS202-1
D829	8-719-107-94	DIODE 1SS202-1
D830	8-719-107-94	(AEP,E)...DIODE 1SS202-1
D831	8-719-107-94	(AEP,E)...DIODE 1SS202-1
D832	8-719-107-94	(FORMER)...DIODE 1SS202-1
D833	8-719-107-94	(FORMER)...DIODE 1SS202-1
D834	8-719-107-94	(FORMER)...DIODE 1SS202-1
D835	8-719-107-94	(FORMER)...DIODE 1SS202-1
D836	8-719-107-94	(FORMER)...DIODE 1SS202-1
D837	8-719-107-94	(FORMER)...DIODE 1SS202-1
D838	8-719-107-94	(FORMER)...DIODE 1SS202-1
D839	8-719-107-94	(FORMER)...DIODE 1SS202-1
D840	8-719-107-94	(FORMER)...DIODE 1SS202-1
D841	8-719-107-94	(FORMER)...DIODE 1SS202-1
D842	8-719-107-94	(FORMER)...DIODE 1SS202-1

ELECTRICAL PARTS

Ref.No.	Part No.	Description
D843	8-719-107-94	(FORMER)...DIODE 1SS202-1
D844	8-719-107-94	(FORMER)...DIODE 1SS202-1
D845	8-719-107-94	(FORMER)...DIODE 1SS202-1
D846	8-719-107-94	(FORMER)...DIODE 1SS202-1
D847	8-719-107-94	(FORMER)...DIODE 1SS202-1
D848	8-719-107-94	DIODE 1SS202-1
D849	8-719-107-94	(FORMER)...DIODE 1SS202-1
D851	8-719-107-94	DIODE 1SS202-1
D852	8-719-107-94	DIODE 1SS202-1
D853	8-719-107-94	DIODE 1SS202-1
D854	8-719-107-94	DIODE 1SS202-1
D855	8-719-107-94	DIODE 1SS202-1
D871	8-719-107-94	DIODE 1SS202-1
D872	8-719-107-94	DIODE 1SS202-1
D873	8-719-107-94	DIODE 1SS202-1
D874	8-719-107-94	DIODE 1SS202-1
D875	8-719-107-94	DIODE 1SS202-1
D890	8-719-913-59	DIODE LT-9230D
D891	8-719-913-59	DIODE LT-9230D
D892	8-719-919-20	DIODE GL-9NG260
D893	8-719-919-20	DIODE GL-9NG260
D894	8-719-919-12	DIODE GL-9ND12
D895	8-719-919-12	DIODE GL-9ND12
D896	8-719-909-20	(AEP,E)....DIODE GL-9NG2
D897	8-719-909-20	(AEP,E)....DIODE GL-9NG2
D898	8-719-909-20	DIODE GL-9NG2
D899	8-719-919-24	DIODE GL-9HY22
D901	8-719-107-94	(FORMER)...DIODE 1SS202-1
D902	8-719-107-94	(FORMER)...DIODE 1SS202-1
D903	8-719-107-94	(FORMER)...DIODE 1SS202-1
D904	8-719-107-94	(FORMER)...DIODE 1SS202-1
D905	8-719-107-94	(FORMER)...DIODE 1SS202-1
D906	8-719-107-94	(FORMER)...DIODE 1SS202-1
D907	8-719-107-94	(FORMER)...DIODE 1SS202-1
D908	8-719-107-94	(FORMER)...DIODE 1SS202-1
D909	8-719-107-94	(FORMER)...DIODE 1SS202-1
D910	8-719-107-94	(FORMER)...DIODE 1SS202-1
D911	8-719-107-94	(FORMER)...DIODE 1SS202-1
D912	8-719-107-94	(FORMER)...DIODE 1SS202-1
D913	8-719-107-94	(FORMER)...DIODE 1SS202-1
D914	8-719-107-94	(FORMER)...DIODE 1SS202-1
D915	8-719-107-94	(FORMER)...DIODE 1SS202-1
D916	8-719-107-94	DIODE 1SS202-1
F801 ⚠	1-532-285-00	(AEP,E)....FUSE, TIME-LAG
F801 ⚠	1-532-570-00	(US).....FUSE, GLASS TUBE

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IC101	8-752-002-80	IC CX20028
IC102	8-759-140-66	IC UPD4066BC
IC103	8-759-140-66	IC UPD4066BC
IC201	8-752-002-70	IC CX20027
IC202	8-759-140-66	IC UPD4066BC
IC203	8-759-140-66	IC UPD4066BC
IC301	8-759-912-79	IC IR2E02
IC401	8-759-912-79	IC IR2E02
IC501	8-759-145-58	IC UPC4558C
IC502	8-759-700-04	IC NJM2043D-D
IC503	8-759-700-04	IC NJM2043D-D
IC504	8-759-145-58	IC UPD4558C
IC505	8-759-145-58	IC UPD4558C
IC506	8-759-145-58	IC UPD4558C
IC507	8-759-140-66	IC UPD4066BC
IC508	8-759-140-66	IC UPD4066BC
IC509	8-759-140-01	IC UPD4001BC
IC510	8-759-140-01	IC UPD4001BC
IC511	8-759-984-11	IC MB84011B
IC801	8-759-700-47	IC CX10035
IC802	8-759-602-14	IC M50761-412P
IC803	8-759-600-55	IC M50784SP
IC804	8-759-200-82	IC TC4069UBF
IC805	8-759-201-01	IC TC4066BF
IC806	8-759-913-35	(FORMER)...IC MB88421-160M
IC806	8-759-915-40	(NEW)...IC MB88421-179M
IC807	8-759-913-36	IC MB8844-1341K
IC808	8-759-340-01	(FORMER)...IC HD14001BP
IC809	8-759-340-11	(FORMER)...IC HD14011BP
IC810	8-759-340-11	(FORMER)...IC HD14011BP
IC811	8-759-340-23	(FORMER)...IC HD14023BP
J301	1-507-909-11	JACK, PIN 4P
J302	1-507-796-21	JACK
L101	1-408-918-11	MICRO INDUCTOR 3.3MMH
L102	1-408-918-11	MICRO INDUCTOR 3.3MMH
L103	1-408-918-11	MICRO INDUCTOR 3.3MMH
L104	1-408-923-00	MICRO INDUCTOR 8.2MMH
L105	1-408-923-00	MICRO INDUCTOR 8.2MMH
L106	1-408-929-00	MICRO INDUCTOR 27MMH
L107	1-408-929-00	MICRO INDUCTOR 27MMH
L201	1-408-918-11	MICRO INDUCTOR 3.3MMH
L202	1-408-918-11	MICRO INDUCTOR 3.3MMH
L203	1-408-918-11	MICRO INDUCTOR 3.3MMH
L204	1-408-923-00	MICRO INDUCTOR 8.2MMH
L205	1-408-923-00	MICRO INDUCTOR 8.2MMH
L206	1-408-929-00	MICRO INDUCTOR 27MMH
L207	1-408-929-00	MICRO INDUCTOR 27MMH
L501	1-408-096-00	MICRO INDUCTOR 470UH
LED301	1-806-968-11	DIODE (LED BLOCK)
LED302	1-806-967-11	DIODE (LED BLOCK)
LED401	1-806-968-11	DIODE (LED BLOCK)
LED402	1-806-967-11	DIODE (LED BLOCK)
LPF101	1-231-388-00	FILTER, LOW PASS
LPF102	1-235-186-00	ENCAPSULATED COMPONENT
LPF201	1-231-388-00	FILTER, LOW PASS
LPF202	1-235-186-00	ENCAPSULATED COMPONENT
M861	8-835-124-01	MOTOR, DC (DNE-7101A)
M862	1-541-163-00	MOROR REEL
M881	8-835-124-01	MOTOR, DC (DNE-7101A)
PL861	1-518-563-11	LAMP, PILOT
PL881	1-518-563-11	LAMP, PILOT
PM861	1-454-316-00	SOLENOID
PM862	1-454-316-00	SOLENOID, PLUNGER
PM863	1-454-374-11	SOLENOID, PLUNGER
PM881	1-454-316-00	SOLENOID
PM882	1-454-316-00	SOLENOID, PLUNGER
PM883	1-454-374-11	SOLENOID, PLUNGER
PS801	1-532-605-00	LINK, IC
PS802	1-532-605-00	LINK, IC
Q101	8-729-900-74	TRANSISTOR DTC143TS
Q102	8-729-900-74	TRANSISTOR DTC143TS
Q103	8-729-900-74	TRANSISTOR DTC143TS
Q104	8-729-900-74	TRANSISTOR DTC143TS
Q105	8-729-900-80	TRANSISTOR DTC114ES
Q106	8-729-900-80	TRANSISTOR DTC114ES
Q107	8-729-900-80	TRANSISTOR DTC114ES
Q108	8-729-900-80	TRANSISTOR DTC114ES
Q109	8-729-900-80	TRANSISTOR DTC114ES
Q110	8-729-900-80	TRANSISTOR DTC114ES
Q111	8-729-606-33	TRANSISTOR 2SC2603F
Q201	8-729-900-74	TRANSISTOR DTC143TS
Q202	8-729-900-74	TRANSISTOR DTC143TS
Q203	8-729-900-74	TRANSISTOR DTC143TS
Q204	8-729-900-74	TRANSISTOR DTC143TS
Q205	8-729-900-80	TRANSISTOR DTC114ES
Q206	8-729-900-80	TRANSISTOR DTC114ES
Q207	8-729-900-80	TRANSISTOR DTC114ES
Q208	8-729-900-80	TRANSISTOR DTC114ES
Q209	8-729-900-80	TRANSISTOR DTC114ES
Q210	8-729-900-80	TRANSISTOR DTC114ES

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MF:μF, PF:μμF.

RESISTORS
· All resistors are in ohms.
· F : nonflammable

COILS
· MMH : mH, UH : μH

SEMICONDUCTORS
In each case, U : μ, for example:
UA...: μA..., UPA...: μPA..., UPC...: μPC,
UPD...: μPD...

Parts used in this set differ depending on Serial No. shown below.

FORMER	US model AEP model	Up to Serial No. 802,000 Up to Serial No. 500,200
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ELECTRICAL PARTS

Ref.No.	Part No.	Description
Q211	8-729-606-33	TRANSISTOR 2SC2603F
Q501	8-729-178-55	TRANSISTOR 2SC2785
Q502	8-729-178-55	TRANSISTOR 2SC2785
Q503	8-729-178-55	TRANSISTOR 2SC2785
Q504	8-729-900-80	TRANSISTOR DTC114ES
Q505	8-729-900-61	TRANSISTOR DTA114ES
Q506	8-729-900-61	TRANSISTOR DTA114ES
Q507	8-729-900-61	TRANSISTOR DTA114ES
Q801	8-729-201-78	TRANSISTOR 2SD1406
Q802	8-729-141-42	TRANSISTOR 2SD414-R
Q803	8-729-141-42	TRANSISTOR 2SD414-R
Q804	8-729-154-82	TRANSISTOR 2SB548-R
Q805	8-729-178-55	TRANSISTOR 2SC2785E
Q806	8-729-178-55	TRANSISTOR 2SC2785E
Q807	8-729-117-54	TRANSISTOR 2SA1175
Q810	8-729-900-80	TRANSISTOR DTC114ES
Q811	8-729-900-65	TRANSISTOR DTA144ES
Q812	8-729-900-65	TRANSISTOR DTA144ES
Q813	8-729-900-65	TRANSISTOR DTA144ES
Q814	8-729-900-89	TRANSISTOR DTC144ES
Q815	8-729-900-89	(FORMER)...TRANSISTOR DTA114ES
Q816	8-729-900-89	(FORMER)...TRANSISTOR DTA114ES
Q821	8-729-900-65	TRANSISTOR DTA144ES
Q822	8-729-900-65	TRANSISTOR DTA144ES
Q823	8-729-900-65	TRANSISTOR DTA144ES
Q824	8-729-900-65	TRANSISTOR DTA144ES
Q825	8-729-900-65	TRANSISTOR DTA144ES
Q826	8-729-900-65	TRANSISTOR DTA144ES
Q827	8-729-900-65	(FORMER)...TRANSISTOR DTA114ES
Q828	8-729-900-65	TRANSISTOR DTA144ES
Q829	8-729-900-65	TRANSISTOR DTA144ES
Q830	8-729-900-65	TRANSISTOR DTA144ES
Q831	8-729-900-65	TRANSISTOR DTA144ES
Q832	8-729-900-65	(AEP, E)...TRANSISTOR DTA144ES
Q833	8-729-900-65	(AEP, E)...TRANSISTOR DTA144ES
Q834	8-729-900-89	(FORMER)...TRANSISTOR DTA114ES
Q835	8-729-900-61	TRANSISTOR DTA114ES
Q836	8-729-900-61	TRANSISTOR DTA114ES
Q837	8-729-900-61	TRANSISTOR DTA114ES
Q838	8-729-900-61	TRANSISTOR DTA114ES
Q839	8-729-900-61	TRANSISTOR DTA114ES
Q840	8-729-900-61	TRANSISTOR DTA114ES
Q841	8-729-900-61	TRANSISTOR DTA114ES
Q842	8-729-900-61	TRANSISTOR DTA114ES
Q843	8-729-900-61	TRANSISTOR DTA114ES
Q844	8-729-900-89	TRANSISTOR DTC144ES
Q845	8-729-900-89	TRANSISTOR DTC144ES
Q846	8-729-900-89	TRANSISTOR DTC144ES
Q851	8-729-102-03	TRANSISTOR 2SD1020
Q852	8-729-800-83	TRANSISTOR 2SB808
Q853	8-729-800-83	TRANSISTOR 2SB808
Q854	8-729-102-03	TRANSISTOR 2SD1020
Q855	8-729-102-03	TRANSISTOR 2SD1020
Q856	8-729-102-03	TRANSISTOR 2SD1020
Q857	8-729-101-02	TRANSISTOR PH102
Q858	8-729-178-55	TRANSISTOR 2SC2785E
Q861	8-729-900-61	TRANSISTOR DTA114ES
Q862	8-729-900-61	TRANSISTOR DTA114ES
Q863	8-729-900-61	TRANSISTOR DTA114ES
Q864	8-729-900-61	TRANSISTOR DTA114ES
Q865	8-729-900-89	TRANSISTOR DTC144ES
Q866	8-729-900-65	TRANSISTOR DTA144ES
Q871	8-729-102-03	TRANSISTOR 2SD1020
Q872	8-729-800-83	TRANSISTOR 2SB808
Q873	8-729-800-83	TRANSISTOR 2SB808
Q874	8-729-102-03	TRANSISTOR 2SD1020
Q875	8-729-102-03	TRANSISTOR 2SD1020
Q876	8-729-102-03	TRANSISTOR 2SD1020
Q877	8-729-101-02	TRANSISTOR PH102
Q878	8-729-178-55	TRANSISTOR 2SC2785E
Q879	8-729-178-55	TRANSISTOR 2SC2785E
Q881	8-729-900-61	TRANSISTOR DTA114ES
Q882	8-729-900-61	TRANSISTOR DTA114ES
Q883	8-729-900-61	TRANSISTOR DTA114ES
Q884	8-729-900-61	TRANSISTOR DTA114ES
Q885	8-729-900-89	TRANSISTOR DTC144ES
Q886	8-729-900-65	TRANSISTOR DTA144ES
Q899	8-729-245-83	TRANSISTOR 2SC2458
Q901	8-729-900-65	(FORMER)...TRANSISTOR DTA114ES
Q902	8-729-900-89	(FORMER)...TRANSISTOR DTA114ES
Q903	8-729-900-89	(FORMER)...TRANSISTOR DTA114ES
Q904	8-729-900-89	(FORMER)...TRANSISTOR DTA114ES
Q905	8-729-900-89	(FORMER)...TRANSISTOR DTA114ES
Q906	8-729-900-89	(FORMER)...TRANSISTOR DTA114ES
Q907	8-729-900-80	TRANSISTOR DTC114ES
R101	1-247-717-00	CARBON 2.2K 5% 1/4W
R102	1-247-164-00	CARBON 24K 5% 1/4W
R104	1-247-879-00	CARBON 100K 5% 1/6W
R105	1-247-843-00	CARBON 3.3K 5% 1/6W
R106	1-247-851-00	CARBON 6.8K 5% 1/6W
R107	1-247-855-00	CARBON 10K 5% 1/6W
R108	1-247-877-00	CARBON 82K 5% 1/6W
R109	1-247-807-00	CARBON 100 5% 1/6W
R110	1-247-882-00	CARBON 130K 5% 1/6W

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· All resistors are in ohms.
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· MMH : mH, UH : μH

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In each case, U : μ, for example:
UA...: μA..., UPA...: μPA..., UPC...: μPC,
UPD...: μPD...

Parts used in this set differ depending on Serial No. shown below.

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ELECTRICAL PARTS

Ref.No.	Part No.	Description			
R111	1-247-850-00	CARBON	6.2K	5%	1/6W
R112	1-249-421-11	CARBON	2.2K	5%	1/6W
R113	1-247-841-00	CARBON	2.7K	5%	1/6W
R114	1-247-887-00	CARBON	220K	5%	1/6W
R115	1-249-421-11	CARBON	2.2K	5%	1/6W
R116	1-247-887-00	CARBON	220K	5%	1/6W
R117	1-247-833-00	CARBON	1.2K	5%	1/6W
R118	1-247-867-00	CARBON	33K	5%	1/6W
R119	1-247-807-00	CARBON	100	5%	1/6W
R120	1-247-882-00	CARBON	130K	5%	1/6W
R121	1-247-848-00	CARBON	5.1K	5%	1/6W
R122	1-249-421-11	CARBON	2.2K	5%	1/6W
R123	1-247-841-00	CARBON	2.7K	5%	1/6W
R124	1-247-887-00	CARBON	220K	5%	1/6W
R125	1-247-879-00	CARBON	100K	5%	1/6W
R128	1-247-871-00	CARBON	47K	5%	1/6W
R129	1-247-823-00	CARBON	470	5%	1/6W
R130	1-247-823-00	CARBON	470	5%	1/6W
R131	1-247-879-00	CARBON	100K	5%	1/6W
R132	1-247-835-00	CARBON	1.5K	5%	1/6W
R139	1-247-869-00	CARBON	39K	5%	1/6W
R140	1-247-846-00	CARBON	4.3K	5%	1/6W
R141	1-247-895-00	CARBON	470K	5%	1/6W
R142	1-247-822-00	CARBON	430	5%	1/6W
R143	1-247-841-00	CARBON	2.7K	5%	1/6W
R144	1-214-776-00	METAL	91K	1%	1/4W
R145	1-247-838-00	CARBON	2K	5%	1/6W
R146	1-247-871-00	CARBON	47K	5%	1/6W
R147	1-247-848-00	CARBON	5.1K	5%	1/6W
R148	1-247-820-00	CARBON	360	5%	1/6W
R149	1-247-845-00	CARBON	3.9K	5%	1/6W
R150	1-247-886-00	CARBON	200K	5%	1/6W
R151	1-247-887-00	CARBON	220K	5%	1/6W
R152	1-247-845-00	CARBON	3.9K	5%	1/6W
R153	1-247-887-00	CARBON	220K	5%	1/6W
R154	1-247-888-00	CARBON	240K	5%	1/6W
R155	1-247-888-00	CARBON	240K	5%	1/6W
R157	1-247-855-00	CARBON	10K	5%	1/6W
R158	1-247-831-00	CARBON	1K	5%	1/6W
R159	1-247-853-00	CARBON	8.2K	5%	1/6W
R160	1-247-843-00	CARBON	3.3K	5%	1/6W
R161	1-247-867-00	CARBON	33K	5%	1/6W
R162	1-247-879-00	CARBON	100K	5%	1/6W
R163	1-247-879-00	CARBON	100K	5%	1/6W
R164	1-247-887-00	CARBON	220K	5%	1/6W

ELECTRICAL PARTS

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R165	1-247-853-00	CARBON	8.2K	5%	1/6W
R166	1-247-867-00	CARBON	33K	5%	1/6W
R167	1-247-867-00	CARBON	33K	5%	1/6W
R168	1-247-843-00	CARBON	3.3K	5%	1/6W
R169	1-247-807-00	CARBON	100	5%	1/6W
R170	1-247-859-00	CARBON	15K	5%	1/6W
R171	1-247-807-00	CARBON	100	5%	1/6W
R172	1-247-853-00	CARBON	8.2K	5%	1/6W
R173	1-247-853-00	CARBON	8.2K	5%	1/6W
R174	1-247-815-00	CARBON	220	5%	1/6W
R176	1-247-846-00	CARBON	4.3K	5%	1/6W
R177	1-247-867-00	CARBON	33K	5%	1/6W
R178	1-247-867-00	CARBON	33K	5%	1/6W
R179	1-247-843-00	CARBON	3.3K	5%	1/6W
R180	1-247-807-00	CARBON	100	5%	1/6W
R181	1-247-859-00	CARBON	15K	5%	1/6W
R182	1-247-809-00	CARBON	120	5%	1/6W
R183	1-247-853-00	CARBON	8.2K	5%	1/6W
R184	1-247-854-00	CARBON	9.1K	5%	1/6W
R185	1-247-819-00	CARBON	330	5%	1/6W
R186	1-247-849-00	CARBON	5.6K	5%	1/6W
R187	1-247-847-00	CARBON	4.7K	5%	1/6W
R188	1-247-855-00	CARBON	10K	5%	1/6W
R189	1-247-867-00	CARBON	33K	5%	1/6W
R190	1-247-865-00	CARBON	27K	5%	1/6W
R191	1-247-815-00	CARBON	220	5%	1/6W
R192	1-247-835-00	CARBON	1.5K	5%	1/6W
R193	1-247-869-00	CARBON	39K	5%	1/6W
R194	1-247-879-00	CARBON	100K	5%	1/6W
R195	1-247-847-00	CARBON	4.7K	5%	1/6W
R196	1-247-823-00	CARBON	470	5%	1/6W
R301	1-214-879-00	CARBON	100K	1%	1/6W
R302	1-247-861-00	CARBON	18K	5%	1/6W
R303	1-247-879-00	CARBON	100K	5%	1/6W
R304	1-247-855-00	CARBON	10K	5%	1/6W
R305	1-247-855-00	CARBON	10K	5%	1/6W
R306	1-247-878-00	CARBON	91K	5%	1/6W
R307	1-247-831-00	CARBON	1K	5%	1/6W
R401	1-247-879-00	CARBON	100K	5%	1/6W
R402	1-247-861-00	CARBON	18K	5%	1/6W
R403	1-247-879-00	CARBON	100K	5%	1/6W
R404	1-247-855-00	CARBON	10K	5%	1/6W
R405	1-247-855-00	CARBON	10K	5%	1/6W
R406	1-247-878-00	CARBON	91K	5%	1/6W
R407	1-247-831-00	CARBON	1K	5%	1/6W

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ELECTRICAL PARTS

Ref.No.	Part No.	Description
R501	1-247-855-00	CARBON 10K 5% 1/6W
R502	1-247-873-00	CARBON 56K 5% 1/6W
R503	1-247-873-00	CARBON 56K 5% 1/6W
R504	1-217-527-00	FUSIBLE 22 5% 1/4W
R505	1-247-855-00	CARBON 10K 5% 1/6W
R506	1-247-843-00	CARBON 3.3K 5% 1/6W
R507	1-247-816-00	CARBON 240 5% 1/6W
R508	1-247-850-00	CARBON 6.2K 5% 1/6W
R509	1-247-856-00	CARBON 11K 5% 1/6W
R510	1-247-855-00	CARBON 10K 5% 1/6W
R511	1-247-855-00	CARBON 10K 5% 1/6W
R512	1-247-855-00	CARBON 10K 5% 1/6W
R513	1-247-879-00	CARBON 100K 5% 1/6W
R514	1-247-879-00	CARBON 100K 5% 1/6W
R515	1-247-855-00	CARBON 10K 5% 1/6W
R516	1-247-871-00	CARBON 47K 5% 1/6W
R801	1-247-826-00	CARBON 620 5% 1/6W
R802	1-249-421-00	CARBON 2.2K 5% 1/6W
R803	1-247-847-00	CARBON 4.7K 5% 1/6W
R804	1-247-824-00	CARBON 510 5% 1/6W
R805	1-247-857-00	CARBON 12K 5% 1/6W
R806	1-249-421-00	CARBON 2.2K 5% 1/6W
R807	1-247-858-00	CARBON 13K 5% 1/6W
R808	1-247-838-00	CARBON 2K 5% 1/6W
R810	1-247-815-00	CARBON 220 5% 1/6W
R811	1-247-903-00	CARBON 1M 5% 1/6W
R812	1-247-879-00	CARBON 100K 5% 1/6W
R813	1-247-903-00	CARBON 1M 5% 1/6W
R814	1-247-887-00	CARBON 220K 5% 1/6W
R815	1-247-879-00	CARBON 100K 5% 1/6W
R816	1-247-877-00	CARBON 82K 5% 1/6W
R817	1-247-823-00	CARBON 470 5% 1/6W
R818	1-247-879-00	CARBON 100K 5% 1/6W
R819	1-247-847-00	CARBON 4.7K 5% 1/6W
R820	1-247-827-00	CARBON 680 5% 1/6W
R821	1-247-861-00	CARBON 18K 5% 1/6W
R822	1-247-879-00	CARBON 100K 5% 1/6W
R823	1-247-831-00	CARBON 1K 5% 1/6W
R824	1-247-873-00	CARBON 56K 5% 1/6W
R825	1-247-860-00	(FORMER)...CARBON 16K 5% 1/6W
R826	1-247-899-00	CARBON 680K 5% 1/6W
R827	1-247-873-00	CARBON 56K 5% 1/6W
R828	1-247-873-00	CARBON 56K 5% 1/6W
R829	1-247-849-00	CARBON 5.6K 5% 1/6W
R830	1-247-831-00	CARBON 1K 5% 1/6W

ELECTRICAL PARTS

Ref.No.	Part No.	Description
R831	1-247-879-00	CARBON 100K 5% 1/6W
R832	1-247-879-00	CARBON 100K 5% 1/6W
R833	1-247-863-00	CARBON 22K 5% 1/6W
R834	1-247-879-00	(FORMER)...CARBON 100K 5% 1/6W
R834	1-247-875-00	(NEW)...CARBON 68K 5% 1/6W
R835	1-247-879-00	(FORMER)...CARBON 100K 5% 1/6W
R835	1-247-875-00	(NEW)...CARBON 68K 5% 1/6W
R836	1-247-863-00	CARBON 22K 5% 1/6W
R837	1-247-831-00	CARBON 1K 5% 1/6W
R838	1-247-831-00	CARBON 1K 5% 1/6W
R839	1-247-831-00	CARBON 1K 5% 1/6W
R840	1-247-831-00	CARBON 1K 5% 1/6W
R843	1-247-831-00	CARBON 1K 5% 1/6W
R844	1-247-831-00	CARBON 1K 5% 1/6W
R845	1-247-831-00	CARBON 1K 5% 1/6W
R846	1-247-831-00	CARBON 1K 5% 1/6W
R847	1-247-831-00	CARBON 1K 5% 1/6W
R848	1-247-831-00	CARBON 1K 5% 1/6W
R849	1-247-831-00	CARBON 1K 5% 1/6W
R850	1-247-831-00	CARBON 1K 5% 1/6W
R851	1-247-831-00	CARBON 1K 5% 1/6W
R852	1-247-831-00	CARBON 1K 5% 1/6W
R853	1-247-831-00	CARBON 1K 5% 1/6W
R854	1-247-831-00	CARBON 1K 5% 1/6W
R855	1-247-831-00	CARBON 1K 5% 1/6W
R856	1-247-831-00	CARBON 1K 5% 1/6W
R857	1-247-831-00	CARBON 1K 5% 1/6W
R858	1-247-831-00	CARBON 1K 5% 1/6W
R859	1-247-847-00	CARBON 4.7K 5% 1/6W
R860	1-247-847-00	CARBON 4.7K 5% 1/6W
R861	1-247-783-00	CARBON 10 5% 1/6W
R862	1-247-807-00	CARBON 100 5% 1/6W
R863	1-247-863-00	(FORMER)...CARBON 22K 5% 1/6W
R863	1-247-861-00	(NEW)...CARBON 18K 5% 1/6W
R864	1-247-861-00	(FORMER)...CARBON 18K 5% 1/6W
R864	1-247-857-00	(NEW)...CARBON 12K 5% 1/6W
R865	1-247-861-00	CARBON 18K 5% 1/6W
R866	1-247-903-00	CARBON 1M 5% 1/6W
R867	1-247-841-00	CARBON 2.7K 5% 1/6W
R868	1-247-879-00	CARBON 100K 5% 1/6W
R872	1-247-831-00	CARBON 1K 5% 1/6W
R873	1-247-831-00	(FORMER)...CARBON 1K 5% 1/6W
R874	1-247-881-00	(FORMER)...CARBON 120K 5% 1/6W
R875	1-247-873-00	CARBON 56K 5% 1/6W
R876	1-247-867-00	(AEP, E)...CARBON 33K 5% 1/6W
R877	1-247-867-00	(AEP, E)...CARBON 33K 5% 1/6W
R878	1-247-861-00	(US)...CARBON 18K 5% 1/6W
R878	1-247-843-00	(AEP, E)...CARBON 4.7K 5% 1/6W
R879	1-247-861-00	(US)...CARBON 18K 5% 1/6W
R879	1-247-843-00	(AEP, E)...CARBON 4.7K 5% 1/6W
R880	1-247-807-00	CARBON 100 5% 1/6W

NOTE:

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- If there are two or more same circuitsin a set such as a stereophonic machine, only typical circuit parts may be indicated and capacitors and resistors in other same circuits may be omitted.

CAPACITORS:
MF:µF, PF:µµF.

RESISTORS
- All resistors are in ohms.
- F : nonflammable

COILS
- MMH : mH, UH : µH

SEMICONDUCTORS
In each case, U : µ, for example:
UA...: µA..., UPA...: µPA..., UPC...: µPC,
UPD...: µPD...

Parts used in this set differ depending on Serial No. shown below.

FORMER	US model AEP model	Up to Serial No. 802,000 Up to Serial No. 500,200
NEW	US model AEP model E model	Serial No. 802,001 and later Serial No. 500,201 and later Applicable for all sets

ELECTRICAL PARTS

Ref.No.	Part No.	Description
R881	1-247-807-00	CARBON 100 5% 1/6W
R885	1-247-815-00	CARBON 220 5% 1/6W
R886	1-247-815-00	CARBON 220 5% 1/6W
R887	1-247-811-00	CARBON 150 5% 1/6W
R888	1-247-811-00	CARBON 150 5% 1/6W
R889	1-247-811-00	CARBON 150 5% 1/6W
R890	1-247-819-00	(AEP, E)...CARBON 330 5% 1/6W
R891	1-247-815-00	CARBON 220 5% 1/6W
R892	1-247-819-00	CARBON 330 5% 1/6W
R893	1-247-887-00	(FORMER)...CARBON 220K 5% 1/6W
R894	1-247-863-00	CARBON 22K 5% 1/6W
R895	1-249-421-11	CARBON 2.2K 5% 1/6W
R896	1-247-873-00	CARBON 56K 5% 1/6W
R897	1-247-867-00	CARBON 33K 5% 1/6W
R899	1-247-861-00	CARBON 18K 5% 1/6W
R901	1-247-823-00	CARBON 470 5% 1/6W
R902	1-247-822-00	CARBON 430 5% 1/6W
R903	1-247-831-00	CARBON 1K 5% 1/6W
R904	1-247-831-00	CARBON 1K 5% 1/6W
R905	1-247-831-00	CARBON 1K 5% 1/6W
R906	1-247-831-00	CARBON 1K 5% 1/6W
R907	1-247-831-00	CARBON 1K 5% 1/6W
R908	1-247-866-00	CARBON 30K 5% 1/6W
R909	1-247-866-00	CARBON 30K 5% 1/6W
R911	1-247-823-00	CARBON 470 5% 1/6W
R912	1-247-822-00	CARBON 430 5% 1/6W
R913	1-247-831-00	CARBON 1K 5% 1/6W
R914	1-247-831-00	CARBON 1K 5% 1/6W
R915	1-247-831-00	CARBON 1K 5% 1/6W
R916	1-247-831-00	CARBON 1K 5% 1/6W
R917	1-247-831-00	CARBON 1K 5% 1/6W
R918	1-247-866-00	CARBON 30K 5% 1/6W
R919	1-247-866-00	CARBON 30K 5% 1/6W
R920	1-247-847-00	CARBON 4.7K 5% 1/6W
R941	1-247-883-00	(FORMER)...CARBON 150K 5% 1/6W
R942	1-247-861-00	(FORMER)...CARBON 18K 5% 1/6W
R943	1-247-883-00	(FORMER)...CARBON 150K 5% 1/6W
R944	1-247-867-00	CARBON 33K 5% 1/6W
R945	1-247-843-00	(FORMER)...CARBON 3.3K 5% 1/6W
R946	1-247-843-00	(FORMER)...CARBON 3.3K 5% 1/6W
R947	1-247-843-00	(FORMER)...CARBON 3.3K 5% 1/6W
R948	1-247-831-00	CARBON 1K 5% 1/6W
R949	1-247-831-00	CARBON 1K 5% 1/6W
R950	1-247-823-00	CARBON 470 5% 1/6W
R951	1-247-867-00	(FORMER)...CARBON 33K 5% 1/6W
R952	1-247-867-00	(FORMER)...CARBON 33K 5% 1/6W
R953	1-247-879-00	(FORMER)...CARBON 100K 5% 1/6W
R954	1-247-861-00	(FORMER)...CARBON 18K 5% 1/6W
R955	1-247-861-00	(FORMER)...CARBON 18K 5% 1/6W

ELECTRICAL PARTS

Ref.No.	Part No.	Description
R956	1-247-861-00	(FORMER)...CARBON 18K 5% 1/6W
R957	1-247-861-00	(FORMER)...CARBON 18K 5% 1/6W
R958	1-247-831-00	CARBON 1K 5% 1/6W
RV101	1-230-577-11	RES, VAR, SLIDE 20K
RV102	1-226-236-00	RES, ADJ, CARBON 10K
RV103	1-226-236-00	RES, ADJ, CARBON 10K
RV104	1-226-236-00	RES, ADJ, CARBON 10K
RV105	1-226-236-00	RES, ADJ, CARBON 10K
RV201	1-230-577-11	RES, VAR, SLIDE 20K
RV202	1-226-236-00	RES, ADJ, CARBON 10K
RV203	1-226-236-00	RES, ADJ, CARBON 10K
RV204	1-226-236-00	RES, ADJ, CARBON 10K
RV205	1-226-236-00	RES, ADJ, CARBON 10K
RV851	1-226-236-00	RES, ADJ, CARBON 10K
RV852	1-226-236-00	RES, ADJ, CARBON 10K
RV871	1-226-236-00	RES, ADJ, CARBON 10K
RV872	1-226-236-00	RES, ADJ, CARBON 10K
RY501	1-515-323-00	RELAY
S001 ⚠	1-553-318-00	SWITCH, PUSH (AC POWER)(1 KEY)
S002	1-554-208-00	SWITCH, SLIDE (TIMER)
S003	1-554-208-00	SWITCH, SLIDE (DIRECTION MODE)
S006	1-554-303-00	(AEP,E)...SWITCH, KEY BOARD (HEADPHONES-A/B)
S007	1-552-539-00	SWITCH, KEY BOARD (DUBBING-NORM SPEED)
S008	1-552-539-00	SWITCH, KEY BOARD (DUBBING-HIGH SPEED)
S009	1-554-303-00	SWITCH, KEY BOARD (AMS BLANK SKIP)
S301	1-553-852-00	SWITCH, PUSH (2 KEY)(DOLBY NR-ON/OFF)
S302	1-553-852-00	SWITCH, PUSH (2 KEY)(DOLBY NR-B/C)
S801 ⚠	1-526-576-51	(E).....SELECTOR, POWER VOLTAGE
S851	1-553-856-00	SWITCH, KEY BOARD (A-REW)
S852	1-553-856-00	SWITCH, KEY BOARD (A-REV)
S853	1-553-856-00	SWITCH, KEY BOARD (A-STOP)
S854	1-553-856-00	SWITCH, KEY BOARD (A-FWD)
S855	1-553-856-00	SWITCH, KEY BOARD (A-FF)
S861	1-554-883-11	SWITCH, SLIDE (A-DIRECTION)
S865	1-553-856-00	SWITCH, KEY BOARD (A-TAPE SELECT/120V)
S867	1-554-410-00	SWITCH, LEAF (A-POWER)
S871	1-553-856-00	SWITCH, KEY BOARD (B-REW)
S872	1-553-856-00	SWITCH, KEY BOARD (B-REV)
S873	1-553-856-00	SWITCH, KEY BOARD (B-STOP)
S874	1-553-856-00	SWITCH, KEY BOARD (B-FWD)
S875	1-553-856-00	SWITCH, KEY BOARD (B-FF)
S876	1-553-856-00	SWITCH, KEY BOARD (B-PAUSE)
S877	1-553-856-00	SWITCH, KEY BOARD (B-REC)
S878	1-553-856-00	SWITCH, KEY BOARD (B-REC MUTE)

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In each case, U : µ, for example:
UA...: µA..., UPA...: µPA..., UPC...: µPC,
UPD...: µPD...

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

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ELECTRICAL PARTS

Ref.No.	Part No.	Description
S881	1-554-883-11	SWITCH, SLIDE (B-DIRECTION)
S882	1-553-856-00	SWITCH, KEY BOARD (B-CASSETTE DETECT)
S883	1-553-856-00	SWITCH, KEY BOARD (B-ACCIDENTAL ERASURE PREVENTION)
S884	1-553-856-00	SWITCH, KEY BOARD (B-ACCIDENTAL ERASURE PREVENTION)
S885	1-553-856-00	SWITCH, KEY BOARD (B-TAPE SELECT/120V)
S886	1-553-856-00	SWITCH, KEY BOARD (B-TAPE SELECT/METAL)
S887	1-554-410-00	SWITCH, LEAF (B-POWER)
T501	1-433-283-11	TRANSFORMER, BIAS OSCILLATION
T801	⚠.1-448-069-11	(US)....TRANSFORMER, POWER
T801	⚠.1-448-078-11	(E).....TRANSFORMER, POWER
T801	⚠.1-448-079-11	(AEP)...TRANSFORMER, POWER
X801	1-527-589-00	OSCILLATOR, CERAMIC
X802	1-527-532-00	OSCILLATOR, CERAMIC

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